# Clinical Lectures
ON THE
# COMMON FORMS OF PARALYSIS FROM BRAIN DISEASE.

*Delivered at University College Hospital,*

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## LECTURE VII.—PART I.

GENTLEMEN,—It remains for me now to speak to you concerning the diagnosis of lesions in the CEREBELLUM. This is an extremely difficult and obscure division of our subject; partly because the functions of the cerebellum are so very imperfectly known, and partly because the situation and anatomical connexions of this organ almost necessarily entail a more than usual amount of functional disturbance of other important and related parts when lesions of its substance are met with.

As you must be all aware, the exact nature of the functions of the cerebellum still remains very uncertain, or, at all events, it is a problem concerning the correct solution of which there is no unanimity of opinion amongst physiologists. The uncertainty of our knowledge in this direction is due to several causes, to some of which I will very briefly call your attention, since in so doing I shall be also explaining the nature of the disturbing influences which tend to obscure or complicate our clinical knowledge of cerebellar disease in its various forms. Before doing this, however, it may be premised that the knowledge we at present possess does enable us to come to one very important conclusion with respect to the functions of the cerebellum—it enables us to say that this organ has no independent function either in the province of mind or in the province of motility. And we may, perhaps, safely affirm, still further, that the cerebellum is much more intimately concerned with the production of bodily movements than with the evolution of mental phenomena.

The anatomical distinctness of the cerebellum from the larger brain and other parts of the nervous system is more apparent than real. Do not its roots (under the name of "peduncles") penetrate into the cerebral hemispheres, into the pons, and into the spinal cord through the medium of the medulla oblongata? The cerebellum is, as it were, an outgrowth from these several parts, and just as there is an anatomical interblending between it and them so must there be a certain community of action in the bringing about of some physiological results.

This community of action must hold good for the functional relationship existing between the cerebrum and the cerebellum, as well as for that existing between the spinal cord and the cerebellum. And the fact that an intimate functional relationship exists between the cerebrum and the cerebellum is shown by the circumstance that atrophy of one cerebral hemisphere entails a corresponding atrophy of the opposite half of the cerebellum; though the subordinate or supplementary nature of the cerebellar function in this relation seems equally well shown by the fact that atrophy of one side of the cerebellum (when it occurs as the primary event) does not entail any appreciable wasting in the opposite half of the cerebrum. The inference to be drawn from this seems obvious. For if the cutting off of certain cerebral stimuli causes a wasting of the opposite half of the cerebellum, this would seem to show that each half of the cerebellum is naturally called into activity in response to or conjointly with the opposite cerebral hemisphere. Whilst conversely, if atrophy of one-half of the cerebellum does not entail a relative diminution in the opposite cerebral hemisphere, this would go to show that the cerebral hemispheres do not act in response to cerebellar stimuli. The action of the cerebrum is therefore shown to be primary; whilst that of the cerebellum is secondary or subordinate.

If, however, the cerebellum acts as an abettor of the cerebrum, and the two together act through the spinal cord, we ought to find that injuries of the cerebellum—even in the absence of all disturbing causes—display themselves not so much by the lack of certain powers or faculties as by some diminution in the perfection with which they are exercised. But a quantitative effect of this kind may easily escape detection when slightly marked, or the precise amount of the defect in any given case may be very difficult to estimate. Here, then, is cause number one why the functions of the cerebellum should have so long remained involved in obscurity. And it may be easily imagined that these difficulties would be increased rather than diminished if this subordinate function of the cerebellum should prove to be twofold rather than simple in its nature. I must confess, however, to the belief that its functions are of this twofold nature. Although I cannot now enter upon the grounds of this belief, and merely make mention of it incidentally, I may state that I regard the cerebellum as in part a well-spring of motor force, and as in part an organ for the discharge of certain of the functions hitherto supposed to depend upon the so-called "muscular sense"—though in respect to these latter attributes I maintain the somewhat novel doctrine that the different impressions upon which they depend lie altogether outside the sphere of consciousness.

Another cause, however, why the functions of the cerebellum should have so long remained in obscurity is to be found in the fact that its situation and connexions are very unfavourable for the elucidation of its functions by means of experiments upon the lower animals. The loss of blood and shock from the operation are mostly severe before the cerebellum can be uncovered. And when to this disturbing cause we add the fact that no attempt to remove this organ can be made without irritating most excitable and important parts of the nervous system to which it is adjacent, some idea may be formed of the difficulties besetting this line of investigation. The animals experimented upon have often died before they have recovered from the shock of the operation, or at all events before the effects of irritation of adjacent parts have subsided. No wonder, therefore, at the difficulty experienced by different observers in arriving at any uniform conclusions from such evidence.

A third reason for the backward state of our knowledge concerning the functions of the cerebellum is to be found in the fact that the experiments naturally made by disease of this organ in man also speak to us in a confused manner, owing to the almost necessary contemporaneous interference with the functions of other anatomically related parts. This is due to the position and anatomical relations of the cerebellum. Shut in as it is, in company with the pons and medulla, within the narrow limits formed by the comparatively unyielding tentorium and the occipital bone, injuries of the cerebellum are especially apt to compress or irritate one or other of these parts—to say nothing of additional disturbing influences which may be aroused in the cerebral hemispheres through the fibres of the superior cerebellar peduncles. Another cause of complication is, moreover, apt to present itself in some cases, owing to the fact that alterations in the bulk of the cerebellum may occasion more or less impediment to the proper emptying of the venæ magnæ Galeni into the straight sinus, and may thus disturb the nutrition as well as the functional activity of those important central regions of the brain whose venous outflow takes this direction.

The different modes of operation of these disturbing influences are, of course, most various in individual cases of cerebellar disease, owing to the different causes of complication which respectively come into operation, and to variations in their relative activity in individual cases. Hence it is that we have such great diversity in the symptoms present in instances of disease of the cerebellum; and hence it is that we are unable to say at all positively which of the symptoms apt to present themselves are referable directly to destruction or to irritation of the cerebellar substance, and which to secondary or indirect effects of those injuries (or of the lesion which caused them) upon adjacent or related parts. We cannot positively decide this point even with reference to the hemiplegia which so frequently occurs in association with lesions in one lateral lobe of the cere-

bellum. But although some uncertainty still exists upon this subject, the balance of evidence seems to point strongly to the conclusion that the paralysis is an indirect effect of injury to one lateral lobe of the cerebellum—induced by the pressure which such lesion occasions upon the corresponding side of the medulla oblongata. We seem led to this conclusion when we find the hemiplegia, if present, habitually occurring on the side of the body opposite to that on which the pressure of the medulla and pons is presumed to exist. And such a view is still further supported by the fact that the functional relations of each lobe of the cerebellum must be chiefly with the half of the cord and the limbs on the corresponding side of the body. This is obvious from the fact that atrophy of one hemisphere of the cerebrum leads to atrophy of the opposite lateral lobe of the cerebellum, and, as I have previously told you, also to atrophy of the opposite half of the spinal cord. These same facts would, therefore, still further entitle us to expect that all direct effects resulting from lesions in one lateral lobe of the cerebellum would (so far as they were concerned with motility) manifest themselves principally upon the side of the body corresponding with the lesion. And this is a conclusion of some importance.

Concerning "functional" diseases of the cerebellum we have no certain knowledge; therefore what I have to say will refer to the grouping of signs and symptoms produced by hæmorrhage, or by occlusion of vessels leading to softening of some portion of the organ. We must consider the effects of such injuries separately, according as they affect one or other of the lateral portions or the middle lobe of the cerebellum. As I have before insisted, we, as practitioners of medicine, have to study the mere grouping of symptoms produced by such lesions, almost irrespective of questions as to the physiological genesis of the several symptoms. We approach these problems from the point of view of the physician or clinical observer, and not from the point of view of the physiologist.

LATERAL LOBE OF THE CEREBELLUM.—Lesions may occur in this region with or without loss of consciousness, according as they are sudden and extensive, or the reverse. Severe pain in the occiput, or it may be in the frontal region, is often complained of, mostly paroxysmal in character; and vomiting occurs perhaps rather more frequently than with injuries in other parts of the brain. Paralysis of the opposite arm and leg is very often met with, though it is not accompanied by much diminution of sensibility. The paralysis seems often to be more marked in the leg than in the arm, and it is also generally absent from the face. The condition differs therefore in both these respects from the more ordinary forms of hemiplegia; it differs also from the kind of paralysis produced by superficial lesions of the cerebral hemispheres, where, though paralysis of the face may be absent, the loss of power falls more upon the arm than upon the leg. There may or may not be some early rigidity in the paralysed limbs; perhaps also some trismus, spasms about the face or of the ocular muscles, or marked rigidity of the neck. No definite observations have, I believe, as yet been made, in cases of this kind, as to the relative temperature of the two sides of the body. Speech is generally not affected, and the movements of the tongue are mostly unimpeded. In the majority of cases also deglutition is not interfered with; but where there is well-marked pressure upon the medulla there may be dysphagia as well as difficulty in articulation. Blindness may supervene, especially where the superior peduncles are affected by the lesion—these parts being, as you will recollect, in close topographical if not functional relation with the corpora quadrigemina, or visual centres. In the course of the affection there is usually no delirium or mental impairment. At the most there may be some intellectual slowness or dulness, or perhaps more or less drowsiness—though of course coma may supervene towards the close in fatal cases, owing to an extension of the lesion or to some independent mischief. The pulse and respiration are not affected in any uniform manner.

At times, however, the symptoms resulting from lesions in one lateral lobe of the cerebellum are still less definite. There may be no trace of a hemiplegic condition, but rather a general muscular weakness of a progressive character associated with a peculiarly unsteady and vacillating gait (titubation). This weakness is mostly more marked in the legs than in the arms. Sometimes the amount of general weakness and prostration has been extreme, so that the patient has been quite unable to stand or even to raise himself in bed.

MEDIAN LOBE OF THE CEREBELLUM.—When the lesion exists in this part of the cerebellum, there is also great latitude with regard to the symptoms produced; the variations encountered being due for the most part to the extent and suddenness of the lesion, though they are also attributable to the variable amount and variable incidence of pressure upon parts of the subjacent medulla and pons. Thus with a large hæmorrhage in this situation causing pressure upon these important parts we may have sudden and well-marked apoplectic symptoms, terminating in speedy death. More frequently, however, the lesions are less severe and the effects altogether slighter. The grouping of symptoms is, in fact, generally very indefinite.

Hemiplegic symptoms are more frequently absent than when we have to do with lesions in the lateral lobes. It so happens, also, that in almost all the cases of disease of the cerebellum in which excitation of the genital functions has been noted the lesion has been situated in its median lobe. Symptoms of this type have, in fact, been noted in about one-third of the recorded cases of disease of the median lobe of the cerebellum. In both sexes there has been evidence of an increase in sexual desires, which in male patients have been attended by frequent erections, with or without seminal emissions. These symptoms, in connexion with lesions of the median lobe, have all the more significance because they do not present themselves where only the lateral lobes of the cerebellum are implicated. With the limitation thus indicated, therefore, there does appear to be some foundation for the old phrenological doctrine as to the function of the cerebellum.

The sense of sight is very apt to be affected by a large lesion in the middle lobe, owing to the proximity of the superior cerebellar peduncles.

Tumours in this situation are more likely than hæmorrhage to lead to ventricular dropsy, and perhaps a certain amount of central softening, by causing some impediment to the return of blood from the veins of Galen into the straight sinus. Where such effects are induced, the symptoms of the cerebellar affection may be masked by vague and variable combinations of symptoms, brought about by the ventricular dropsy and impaired nutrition of central regions of the brain.

### PATHOLOGICAL DIAGNOSIS.

We turn now, gentlemen, to another aspect of the problems of diagnosis. We have to inquire into the cause or nature of the change in brain-tissue, giving rise to one or other of the various sets of symptoms previously described. The question is no longer as to the region of brain implicated, but about the considerations which should guide us in coming to a trustworthy conclusion as to the nature of the change in a given brain region. Have we to do with hæmorrhage, with thrombosis, with embolism, or with some slighter functional derangement in the particular encephalic region presumed to be affected? These, you will recollect, are the common causes of the more suddenly initiated cases of hemiplegia, to which our attention has been confined. We for the present therefore dismiss from consideration those other causes of the hemiplegic state which usually produce their effects more slowly—such as indurating overgrowths, tumours, abscesses, and certain sequences of external injuries to the head in the form of severe unilateral meningitis.

Whatever difficulties beset our path in attempting to discover rules for a correct regional diagnosis—and they are, as you are now aware, only too numerous,—we do not find them diminish when we strive to formulate rules for the discovery of the nature of the change which has occurred in brain-tissue.

In this inquiry no certain or absolutely distinctive signs exist. We have always to do with probabilities more or less remote from certainty. Sometimes, it is true, we are able to be almost sure about our pathological diagnosis; though only too often it is quite impossible for us to come to a decision—the probabilities in favour of hæmorrhage and those in favour of softening being so evenly balanced. Those whose experience with this class of diseases is limited are often much disappointed at this. They expect the point to be readily settled, and very frequently are not slow to come to conclusions on such a subject for themselves.

But the problem of the differential diagnosis between cerebral hæmorrhage and cerebral softening is regarded in a very different light by those physicians who have had the widest experience with this class of affections. Trousseau, for instance, spoke of the question as "one of the most difficult problems in pathology," and others, whose opinions are most valuable, have expressed themselves in much the same terms.

As a general rule, it may safely be said that, in attempting to come to a definite pathological diagnosis, we must be guided by considerations of the age and general state of health of our patient, of the condition of his heart and larger arteries, by the presence or absence of prodromata, by the actual mode of onset of the disease, and by its progress, as regards general symptoms, during the first few days. We do not now look so much to the signs of the actually developed disease—that is, to the presence or absence of early rigidity, of pains in the paralysed limbs, or to the degree of impairment of sensibility. These latter considerations are, I believe, most treacherous and uncertain guides for the establishment of a pathological diagnosis, since variations in the relative intensity of such signs are always far more dependent upon the site and bulk of the brain-tissue injured than upon the particular pathological changes which the injured regions may have undergone. In fact, in attempting a regional diagnosis we concentrate our attention just as steadfastly upon all the signs of the fully established disease, as we do upon the mode of its onset and attendant circumstances when striving to arrive at a pathological diagnosis. But although the principal sources of information towards which we look are different for the solution of these two problems, it is none the less true that each source of knowledge is occasionally capable of supplying valuable collateral information towards the solution of that side of the diagnostic problem to which it is not specially related.

The views above expressed, gentlemen, are not universally held by those who have spoken with most authority concerning diseases of the brain. The contrary point of view of some physicians on this subject is, however, as I venture to think, attributable principally to the comparatively slight attention which they bestow upon the questions of regional symptomatology; and also to the fact that they consider the symptoms of cerebral hæmorrhage and of cerebral softening, as they would have to do if the brain were a small simple organ with a definite set of functions, and not in a manner consistent with the fact that the brain is rather a large and complex organ, made up of parts having very dissimilar functions, injuries of which should therefore reveal themselves differently.

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ON

## A CASE OF PUERPERAL INFECTION.*

BY ROBERT J. LEE, M.D.,

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GENTLEMEN,—A case has recently been under observation in the Burton ward which is sufficiently rare and interesting to deserve your careful attention. It is only lately that one of the complications of puerperal infection which occurred in this case has been made the subject of pathological investigation: I allude to a particular disease of the cardiac valves occasioned by the general infection of the system with the products of decomposition.

The patient, a married woman, thirty-six years of age, was admitted with obscure symptoms of general debility, and considerable pain in the uterine region of the abdomen. She had a miscarriage sixteen weeks before admission, in the fifth week of pregnancy, and had never perfectly recovered. She is described in our Case-book as having "symptoms of inflammation low down in the right iliac fossa—viz., great pain on pressure, and some amount of resistance, but no distinct swelling. The patient looks pale and weak, has a pulse of 160, and has lost flesh considerably. The right leg is flexed on the abdomen, and there is slight pain below Poupart's ligament on the inner side of the thigh." She was prescribed twenty minims of tincture of opium, to be taken immediately, and three ounces of brandy daily; frequent injections of carbolic acid and warm water. A few days after this she had slight hæmorrhage from the vagina and a return of the local pain, which had been alleviated by the treatment. Eleven days later there was an offensive discharge from the vagina, and the pain in the abdomen continued. The extreme pallor of her face led to an examination of the heart, on which the following note was made:—"There is much pulsation visible over the cardiac surface as high as the second intercostal space, and in the arteries of the neck. There is a loud systolic bruit heard over the base of the heart, and widely distributed upwards. It may also be heard in the vessels of the neck. The valvular sounds at the apex and over the right ventricle are clear and normal. She has frequent attacks of vomiting, is excessively pallid, and complains of great pain, extending from the right iliac fossa to the right thigh. The pulse 130; temperature 100°."

Under these circumstances Dr. Wadham was requested to see the patient, and she was transferred to the medical wards. The discharge from the vagina and the pain in the abdomen were such prominent symptoms, however, that she was returned to our ward in three weeks' time in much the same condition as when she left it. She gradually became more feeble, complained of pain in the thorax, and for several hours before her death—ten days from her return to our ward—she was unconscious.

The notes of the post-mortem examination by Mr. Warrington Haward were briefly as follow:—"A few ounces of clear fluid in each pleura. Lungs very œdematous, tough, and congested at the lower part. The pericardium natural. A little soft atheroma immediately above the aortic valves; the heart otherwise natural. Spleen natural. Liver pale, anæmic, slightly fatty, weight 44 oz.; kidneys 12 oz. The uterus fixed, especially on the right side; the upper part containing a sloughing mass, apparently placenta. Right common iliac vein containing coagulum." It is necessary to add to the above account the fact that the patient had never previously suffered from cardiac disease.

We are justified in using the term "puerperal infection" in this case rather than pyæmia, for the reason that there was no evidence of the presence of pus in the uterus or surrounding tissues. We can easily understand that the absorption of decomposing organic substance is not necessarily accompanied by the formation of pus. Although I had an opportunity of examining the uterus, and have it before you for inspection, yet it would have been satisfactory if the heart, kidneys, and parts of other organs had been preserved, in order that you might see the particular cause of the disease now known as endocarditis ulcerosa puerperalis, or mycosis endocardii. We have good reasons for believing that the pathological change in the aortic valves above briefly described as atheromatous, is ulceration produced by the presence of a minute micrococcus which has originated in the decomposing portion of retained decidua, and has been deposited in the tissues of the aorta.

* Abstract of a Clinical Lecture.

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## PARASITIC VEGETABLE FUNGI, AND THE DISEASES INDUCED BY THEM.

DISCUSSED FROM SPECIAL STANDPOINTS.

BY STAFF-SURGEON THOMAS COLAN, M.D., R.N.

(*Communicated by the* DIRECTOR-GENERAL OF THE MEDICAL DEPARTMENT OF THE NAVY.)

PARASITIC VEGETABLE FUNGI are about the most obscurely known, and were until recently the least studied, of all vegetable productions. The same may be said regarding the diseases induced by these plants. Any information, therefore, that will throw a ray of light on the obscurity which still involves both will doubtless tend to the amelioration of diseases which are accounted amongst the most obstinate to which men, the lower orders of animals, and even vegetables, are subject.

I have taken a view of the parasitic vegetable fungi and fungous diseases from special standpoints, and have arrived at special conclusions. What I have done has been,

to gather up and put together facts and opinions given by different writers, and from them to weave, as it were, the theories set forth in this memoir. I will not attempt to say that I have so clearly proved any conclusion that it can be admitted into the region of science as a demonstration; but I have ventured to build up hypotheses which I am inclined to think will, in the course of time, be so much strengthened that they will merge into demonstrations.

With such pathologists, naturalists, and botanists as Erasmus Wilson, Tilbury Fox, W. B. Carpenter, Huxley, Hooker, Balfour, and others, at work in this country, and the knowledge afforded by the writings of Malmsten, Bazin, Cazenave, Hofmeister, and others abroad, there seems little reason to fear lest these subjects should not receive their due share of attention.

I shall devote my remarks principally to the Entophyta and the diseases which they cause; but many of them will apply equally to the Epiphyta. To strengthen my arguments, I have ventured to draw illustrations from, and to make comments on, the Entozoa in the animal world. I shall endeavour to show—1. That the immediate origin of fungi in general is from their kind, and not from spontaneous generation. 2. That many of what are now regarded as distinct species of fungi are not so, but that it is probable the species are few in number. 3. How the parasitic vegetable fungi are communicated to, and gain entrance into, the various structures they are found in. 4. That parasitic vegetable fungous diseases are the result of fermentation. 5. The true *rationale* of treatment to be adopted in the latter.

### 1. *The immediate origin of Fungi.*

It was formerly the belief of some writers, and may be now of others, that fungi arose from spontaneous generation—i.e., from no ova of their kind,—but were formed from a mucus capable of organisation, or from changes occurring in the cells of more highly-organised plants and animals in a state of disease or decay. There appeared to be ground for this belief, seeing that fungi made their appearance in almost innumerable quantities, and with great rapidity in places favourable to their development. It could scarcely be imagined that there were ova for all these, and so, from ignorance of the following facts, many persons believed they arose spontaneously.

Dr. Carpenter* mentions that the number of sporules any one fungus can give off is enormous. For instance, a single individual of the puff-ball (Lycopodon) tribe has been calculated to send forth more than ten millions of sporules, the minuteness of which is such that they are scattered through the air in the finest possible dust, and it is difficult to find a place from which they should be excluded. Again, a single grain of wheat infected with the bunt or stinking rust, caused by the fungus Uredo caries or Sitophyta (Uredo fœtida of some authors) may contain four million minute balls of fetid powder. We find similar instances amongst parasitic animals. The larval trichinæ (Trichina spiralis) Dr. Cobbold believes may actually develop in the human body to at least twenty millions, and we may get twelve millions of ova in ten feet of the broad tapeworm (Bothriocephalus latus). With regard to the rapidity of development of some fungi, it is known that some of the mildew or mould tribes pass through every stage of growth to perfect maturation of the seed in less than two days.

It naturally follows that the fact of such millions of ova falling on favourable spots and developing there with great rapidity leads us to the conclusion that fungi arise immediately from their like, and not from spontaneous generation.

As to the primary or remote origin of these plants, it is shrouded in the mystery which envelopes the beginning of all life, animal or vegetable. All we really know is, that things live; but what the life that is in them is, or the *modus operandi* by which inert matter became first instinct with life, has not been revealed to us by the Lord and Giver of Life, nor has our reason attained to such knowledge. For all practical purposes it is sufficient for us to know that fungi arise from ova of their kind.

* I beg to acknowledge that I am especially indebted to Dr. Carpenter for many of the facts made use of by me, and which will be found in his valuable work on the Microscope.

### 2. *Species of Fungi are probably few in number.*

It will, I believe, be found by research, carried on by observation and experiment in the fields of botany and chemistry, that there are but few distinct species of fungi, and that several now looked upon as distinct *are merely stages of growth and varieties of two or more species in process of development.*

Botanists find great difficulty in the fact of the same species exhibiting great variety in size and other particulars, according to the different circumstances of its growth; and it has been found that the same species may not only exhibit dissimilar modes of growth, but also dissimilar modes of fructification. De Bary, in describing the changes which take place in certain groups of the myxogastric fungi, especially in the Œthallium septicum, gives an idea of how easily a growth development may be mistaken for a distinct animal or vegetable production. Prof. Henblow has observed that the Uredo rubigo vera, a fungous parasite which grows on the leaves and chaff scales of wheat, causing the rust, is only an *earlier* growth of the Puccinia graminis, which grows on the straw, producing the mildew; and yet both seem to have a distinct fructification. Dr. Carpenter has described two kinds of fructification which the *same* individual may put forth at different periods of its life—viz., "the Basidio-sporous, in which the spores are developed by an outgrowth from free points (Basidia); and Theca-sporous, in which they are developed in the interior of cases (Thecæ asci), which had been previously considered as separately characterising the two principal groups into which the class is primarily divided." Amongst animal parasites we find instances which tend to strengthen the force of these facts. Take the entozoa. The young (scolices) of the cestoid worm were until recently regarded by naturalists as species and genera quite distinct from the worm, and which, when found distended with water in the vertebrata, were regarded as hydatids; the young of the common tapeworm (Tænia solium) were believed also to be distinct species, and were called Cysticerci cellulosæ when found in measles in the pig and in man; the young (scolex) of the tænia found in dogs, and which causes the "staggers" in sheep, was classed as distinct, and called Cœnurans cerebralis; the Cysticercus bovis, which causes beef or veal measles, was thought also to be distinct, but was afterwards discovered to be but a stage of growth of the Tænia mediocanellata—probably the most common form of the tænia found in man; and, lastly, what were called Vermes circubitans were supposed to be distinct, but it is now known that they are but the mature segments (prologlottides) of the Tænia solium, which are thrown off by the worm in the intestinal canal and discharged.

With such facts before us, all tending to the diminution in the numbers of parasitic species, many of the following so-called separate and distinct species may be found to be also but stages of growth and varieties of a few. The Oidium Tuckeri, which causes or extends vine disease; the Ergota abortifaciens found in ergot; the Oidium albicans, which flourishes in aphthæ and diphtheria, and in the last stages of many diseases; the Achorion Schönleini of honeycomb ringworm; and another kind of fungus observed as a white mould on some turnip leaves,—all these are of one genus, and may be of one species. The Botrytis infestans—a parasitic vegetable fungus, supposed to have a large share in the production of the potato disease; the Botrytis parasitica found in turnips; the Botrytis brasiamæ, muscardine or silkworm rot,—are also of one family. So, too, are the Puccinia graminis and Uredo caries already mentioned, and the Uredo segetum—a fungus which causes the bunt or dust brand in wheat. The same may be said of the Mucor mucedo, or common mould, which grows on fruits, pastry, and preserves; and the Ascophoræ mucedo, the blue mould of bread.

It may be objected to this view that, as certain parasitic vegetable fungi exist only on *living* vegetable or animal substances, other certain plants on *dead* matter, and others again on decaying substances, or on the fæces or food of living animals, or in water, they must be distinct species. To this I answer that such is not necessarily the case, since it is possible that all stages of growth and varieties of one species may exist *anywhere* under circumstances favourable to their development; and that it is because they are in different circumstances, and consequently exhibit a different

appearance (the difference being conditional on the composition of the pabulum they live on), that they are viewed as distinct species. A fungus which exhibits certain characters in a plant may be altogether altered in appearance when developed in an animal. Fungi are of a nitrogenous nature, and absorb oxygen and give out carbonic acid, being so far of the nature of animals. If this be the case, it is very natural to suppose that spores developing in an animal substance would exhibit a different appearance when developing in a vegetable. Climate may also have an effect in altering their characteristics.

I am aware that it is thought that the same fungus when placed in different circumstances produces plants which differ, not only specifically, but generically; but I am inclined to think that this opinion is due to the want of knowledge that the stages of *growth* and *varieties* of a plant differ in appearance and fructification. Now, what would be the practical result of knowing that what were regarded as many distinct species were really but the stages of growth and varieties of a few? Simply this, instead of treating any fungus as distinct, and therefore having nothing to do with any other like growths in the neighbourhood, we would examine all the latter, and see whether they were stages of growth and varieties of one, and treat them accordingly. By checking one we might check all.

On the former supposition, every disease might require a different remedy; on the latter, the same remedy may do for all growths and varieties of one species. When I come to indicate the treatment to be adopted in parasitic vegetable fungous diseases, it will be found that the same medicines will do for all, showing (though, I admit, not conclusively) that the view I have taken is correct. Though outside my subject, I may observe that the foregoing remarks may be applied in great measure to the parasitic animal fungi and to the entozoa.

It would prove highly interesting, and perhaps of great value, if the following observations and experiments were carried on in the future:—To note, if in places where any one of the following diseases existed there were also one or more of the others—the vine disease, disease in turnip-leaves, ergot, and, amongst human beings, thrush and diphtheria; to do the same regarding the potato disease, the turnip disease, Tinea favosa, and even Tinea tonsurans and Plica polonica in man; in like manner to deal with the rust, mildew, smut, and bunt; and also with mouldy fruits and mouldy bread. If in the first case we found that such diseases did exist together, we might conclude that the Oidium fungus in its stages of growth and varieties was at work, causing all the mischief; in the second, the Botrytis; in the third, the Uredo; and, in the fourth, the Mucedo; and we would also have reason to believe that animals and plants catch disease from one another. Experiments might then be made by transplanting spores, and even in some cases the whole plant, from one plant to another, or from animals to plants, or *vice versâ*, and mark the result. If the Oidium albicans from man developed into Oidium Tuckeri in turnip leaves, and if the Achorion Schönleini from the human subject produced ergot; if Botrytis infestans in the potato developed into Botrytis parasitica in turnips, or the Botrytis bassianæ in silk-worm; if the Puccinia graminis caused Uredo segetum or caries to appear in wheat; and, lastly, if the Mucor mucedo of fruits produced the Ascophoræ mucedo in bread, we might come to the same conclusion as above. If we should do so, our course of action would be clear: when we found out which was the earliest growth of a fungus, we could destroy it, and prevent its further spread from the fountain head, as it were, and then, knowing the several growths and varieties of it, we could cure them in the same manner. I am speaking of curing with medicines, but there may be cases where stamping out might prove to be the best remedy. Where human beings, as in diphtheria, were virulently infected from vine disease, if we could not cure the latter we should totally eradicate the vine; if the former caused the latter, persons affected with it should remove from the vicinity of the plant. Similar action might be taken in the case of Tinea favosa, and potato or turnip disease, &c. Where vegetables are infected by other and different ones, we must try and cure them, or stamp out the one in which lies the cause of the evil.

Amongst animal parasites we can even now do a great deal to alleviate, if not eradicate, some complaints. When staggers appear, in sheep, let us look for tæniæ in the dog, get rid of them, and not let the dog eat of infected sheep. When measles makes its appearance in swine and human beings, and convulsions, chorea, hysterical fits, &c., in the latter, it is probable that we shall find Tænia solium in man, the ova of which have been the cause of the mischief; we must destroy the worms, and then try to dispose of the remaining ova. The same applies to beef and veal measles, and Tænia mediocanellata.

*(To be continued.)*

## TREATMENT OF FRACTURES.

By W. H. B. WINCHESTER, F.R.C.S.

THE principle of permanent extension in the treatment of oblique fractures having been again brought to the notice of the profession by Mr. G. B. Browne, in THE LANCET of the 10th Oct., with a description of his "improved extension apparatus," induces me once again to offer a few remarks on this important subject.

The experience of all surgeons in the general application of this principle, whatever the form of apparatus used, has been and is one of acknowledged failure. Any improvement in the means, therefore, however slight, tending to more favourable results, is worthy of commendation, and justifies the inventor in introducing it to the profession. Seeing, however, that this principle has been so long strenuously advocated, and has had so much skill and ingenuity expended upon it, with really no better results from the most recently improved over almost the earliest and certainly the most simple form of apparatus—viz., Liston's long splint—is it not a logical inference that the *principle* itself is at fault, and not the particular form of instrument used?

The medical session having just commenced, this seems to me a very appropriate time to discuss this subject, and I do hope hospital surgeons may be induced to devote some little attention towards the solution of this knotty point.

Muscular contraction—the cause of the difficulty—is a vital power or force not only always ready to act, but always in action, though passive, latent, reserved, as evidenced in the cases under consideration, and whenever muscular fibre is severed. If, then, it is of such potent energy as to require all the ingenuity of practical mechanicians to restrain or overcome, it must act a very important part in the animal economy, particularly with reference to the consolidation and density of bones. This physiological aspect of the question is well worthy of investigation, though up to the present time it has not, so far as I am aware, received much attention. It is, however, an indisputable fact, that in the strong and muscular there is a corresponding strength and density of bone, and *vice versâ*. If, again, this force has incessant existence, the ordinary healthy function of renovation, or of deposition and absorption, must be carried on under its influence, and therefore the loss, suspension, or diminution of it, from whatever cause arising, must tend to weaken, retard, and even altogether arrest the functional activity of the part. It is essential, therefore, for the restoration of a fractured bone, that it should be placed under the same influence and as nearly as possible in the same position as previously existed when the natural process of renovation was being carried on.

Extension, however, is an active artificial force diametrically opposed to, and intentionally exerted to overcome, recent or active muscular contraction; and, if made permanent, also of that passive state of permanent contraction which is the normal condition of healthy muscular fibre.

If, then, as I have endeavoured to show, muscular contraction, instead of being an injurious, is a beneficial force, it becomes of paramount importance that it should be utilised but not destroyed, and thus by its innate strength of impact only rendered as active and efficient a means for preservation of position as it has hitherto been for displacement, besides affording at the same time the exact amount of natural stimulus, accurately adjusted to the requirement of each individual case, necessary to excite speedy and perfect reparation.

To illustrate the injurious effect of permanent extension, I need only draw attention to cases of fracture of the patella, where the natural result of muscular contraction is the same as that artificially produced in other cases—viz., the separation of the fractured ends; and it is impossible in permanent extension for it to be otherwise. Here, unfortunately, it is opposed to the approximation of the surfaces of the broken bone, and hence the surgeon's difficulty. There he interposes and opposes the approximation, and hence again his difficulty with the same result—viz., retarded union. Now let us see how the surgeon tries to imitate the natural effect of muscular contraction. Having succeeded, though unintentionally, by means of permanent extension in producing a case of retarded union or ununited fracture, he is anxious to re-excite the dormant natural effort, and this he does by rubbing the fractured ends forcibly together, and at the same time adopting such means as he thinks most likely to preserve position, even to the drilling of holes in the shaft of the bone, near the seat of fracture, and driving iron, ivory, or wooden pegs into these holes, and then ties them as closely together as he can in order that the stimulus of the previous friction should not be lost. Whereas, had he only utilised that which he has destroyed—viz., the natural stimulus and retentive tendency of muscular contraction—he would have saved himself all the anxiety, and his patient the endurance of prolonged suffering.

In THE LANCET for the 17th Oct. is a report of a case of ununited fracture treated in the Middlesex Hospital, which admirably illustrates the injurious tendency of extension, and at the same time of improperly constructed forms of apparatus. No less than three different forms of splints, acting on the same principle, were applied in this case with the same unsatisfactory result. It need only be contrasted with cases of a similar nature, treated in the same hospital, under the care of Mr. De Morgan in 1855, upon the principle for which I contend, to establish the correctness of that principle in contradistinction to the method of treatment as therein and generally adopted.

*Permanent extension*, as applied to fractures, and *extension* also after replacement, should be discarded from the vocabulary of the surgeon, and *retention* substituted for it; and this is of easy accomplishment by properly constructed forms of apparatus.

Having on former occasions, in THE LANCET and other periodicals, described various forms of my apparatus for carrying out the principle above indicated, the chief of which are now in the Museum of the Royal College of Surgeons, I will, on this occasion, describe a ready but effective means by which the principle can be tested, by any surgeon desirous of doing so, at the cost only of a little trouble at first, but which, unlike the ordinary extension apparatus, when once properly adjusted involves no further trouble.

For fractures of the thigh a Liston's long splint, or a piece of deal of length sufficient to reach from about three inches above the spine of the ilium to a little beyond the sole of the foot, and of about three inches wide, will do. Make longitudinal slits into the holes in the upper end of Liston's splint and do the same in the other. Make a pad of the same width, and a little exceeding in length the splint; three or four folds of linen will do. Sew these together, and at the same time, on one side, the whole of its length, pieces of ordinary bandage sufficiently long to reach round the body and limb, and on the other a piece of linen about three times the width of the splint. This is for the purpose of securing the stuffing afterwards described. Let the patient lie on his back, as if erect, the body not inclining to one side more than the other. Place the pad against the limb, and fasten it by means of the bandage, so that it lies closely throughout its whole length. Against the pad lay the splint, and where it touches the limb secure it by means of extra pieces of bandage. Now adjust the perineal band. This must be done with care, as the length when once fixed must not be altered. Fill in now completely, evenly, yet firmly, the interspaces between the body, limb, and splint, with any material at hand which will not readily shift its position, such as rag, paper, tow, hay, straw, &c. Having done this, secure the ends and sides to the splint by means of drawing-pins or tacks. Remove the splint from the side, and secure the pad immovably to it by tying it through and through. Adjust the fracture, and apply the splint in the ordinary way by bandage, which for security should be tacked to the sides of the splint. By this means the natural form and length of the limb will be preserved; muscular contraction restored in all its energy, not destroyed; and nature thus assisted, not impeded, by art, is enabled to perform her work in the most speedy and perfect manner possible. More than this art cannot achieve.

In fractures of the leg, whether simple, compound, or comminuted, a rough-and-ready yet effective apparatus can be contrived as follows:—Take a piece of board half an inch thick and somewhat wider than the limb; scribe the outline of the sound limb upon it, and, by any ready means at hand, pierce holes at equal distances apart along each side parallel to the line, allowing a little space for a pad (if nothing better is at hand, a bit of red-hot iron will do to make the holes); reverse the board and drive pegs of sufficient height into them, and on the underside fasten at each end a semi-circular piece of wood, thus making it a rocking cradle, in order that the limb may be enabled, on lateral movement, to carry the cradle or splint with it. Here again the natural form is restored. In cases of compound fracture, the pegs on either side can be removed and any portion of the limb exposed for dressing.

Having now indicated a means by which, at the cost of a little trouble only, the principle I have advocated for the last three-and-twenty years can be tested, I leave it in the hands of the profession to decide whether it is worthy of consideration or not. I trust that those who do give it a trial will not fail, in the interest both of the profession and of the art and science of surgery, to report their experience.

I must not, however, be misunderstood. Undoubtedly there are many cases treated successfully by the ordinary method, but it is in those cases in which the apparatus approximates most nearly to the natural form of the limb that the best results occur. A straight splint is the proper appliance for a straight limb, and a curved splint for a curved limb; that, in fact, the appliance should assume the natural form of the limb, whatever that form may be, whether by previous adjustment to the sound limb, or by careful adjustment to the injured one at the time of application.

I submit a sketch of an inexpensive apparatus, which, although it has already appeared in THE LANCET, it may not be amiss to reproduce. It is made of iron. The foot and knee pieces are of leather. It has two movable arms for adjustment to the seat of fracture, and a central joint which admits of lateral movement. Its application is as follows: Loosen the screws at the back; place the sound limb on it; regulate the length, and tighten the screws; remove; examine the index at the central joint; mark the deviation from the central line on the opposite side of the line, turn the index to it, and fix the screw; place a pad on the splint, and apply it to the injured limb. It requires but a few minutes to adjust, and is applicable for any sort of fracture.

Barnes.

## VENETIAN HOSPITALS.

BY FREDERICK ROBINSON, M.D., F.R.C.P.,
SCOTS FUSILIER GUARDS.

IN the month of August I visited Venice, and took an opportunity of going over the Civil Hospital there. Possibly some notes then made may interest those readers of THE LANCET who, like myself, have hitherto been little conversant with the internal economy of such institutions in Italy. And the somewhat generally received impression, in which I shared, that a city so peculiarly, and, in a sanitary point of view, so unfavourably placed must necessarily cause a large amount of sickness, led me to anticipate the prevalence of disease to a greater extent and of a graver type than is met with in other continental towns. The

month of August, too, I looked upon as probably *the* period of year when maladies ordinarily associated with defective sanitation would most abound. I left Venice, however, with a better opinion of it as a place of residence than I had previously entertained—a circumstance based partly on observation and partly on facts elicited from one of the resident medical officers of the institution to which I have referred. These latter it will be my object to condense as much as possible. My ignorance of the Italian language and superficial knowledge of the French—the only medium of communication available—placed me at a disadvantage.

The Civil Hospital is a very large, massive old building, of an elongated, quadrangular form. Its former designation was the Scuolo de S. Marco—one of the old ecclesiastical foundations, of late utilised for other purposes. Probably it is the best edifice both as regards construction and site that could be thus turned to account, notwithstanding its antiquity. For, as regards situation, a comparatively open position, arising landward from its abutment on one of the very few open—"breathing"—spaces (campos) that are in the city, and, seaward, the junction of one of the larger branch canals (Rio del Mendicanti) with the Adriatic, point to it as a locality more suitable, as a hospital, than can be met with in other parts of Venice, where very narrow streets and densely-packed houses are the rule.

The hospital accommodates 1000 inmates. The larger rooms contain some 80 beds, the smaller 40. There are no small ones to accommodate cases needing segregation—a defect. The wards, as might be expected in an old building, are somewhat deficient in height. Bedsteads of iron; bedding of the ordinary kind. The beds are placed closer to each other than is advisable in some wards; not so in others. On the whole, the distance between them is much the same as obtains in our London hospitals. Ventilation is effected alone by open windows. These are sufficiently numerous, and, being placed on opposite walls, a free current of air is afforded. There is an absence everywhere of "hospital smell," and the rooms are clean and orderly. The nurses I saw were not Sisters of Charity. The material of which the floor is made everywhere in Venice, both in upper and lower apartments, must tend greatly to prevent the propagation of infectious disease (alike in private houses and public institutions), and to keep the wards cool and clean. It is a kind of composite made apparently of small fragments of red marble cemented into a mass, the surface being smooth, hard as granite, and apparently very durable.

Diseases are classified, and wards set apart for fevers, skin affections, venereal and ophthalmic cases, medical and surgical complaints. The only malady prevalent to a marked degree every year is one that the site of Venice would plainly lead one to expect—viz., intermittent fever. It is common late in the autumn. Another more grave affection I fully anticipated meeting with at the time of my visit, and presumed would cause large mortality—viz., enteric fever. I was in error. The disease indeed occurs in summer, but not, it would seem, as a virulent epidemic, only cases at intervals. At the date of my inspection very few patients were thus affected, and they were convalescent after apparently slight attacks. There were some ordinary examples of chest disease (consumption, pleurisy, and heart affections) and one of diabetes. I found that tapping the chest by aspiration was a procedure approved and followed; and, indeed, my inquiries elicited that the treatment of disease generally was in accordance with the views held by our latest and best authorities, and that the Sangrado system, for which Italian physicians had at one time a rather unpleasant notoriety, was exploded. Thus the supporting, building-up procedure, especially with reference to pneumonia, use of wine and nourishment, is carried out. How far these restoratives correspond with our own I shall presently consider.

The lock wards were at the top of the building, equally in good order with the others. Scarcely any of the women were in bed, and as periodical examination of prostitutes is carried out, it would seem that the ailments were not of a severe character. A physiognomist would not have been impressed favourably with the countenances presented there. Essentially animal, especially as regards the mouth and chin, jaw broad and flat, forehead low, nose coarse and sunken, countenance pale—the *ensemble* was that of a being in whom the moral faculties were wholly wanting. I dwell on this point because, glancing round the wards, I was struck with the strong likeness the patients, all young, presented to each other. Roman women of ancient history, types of sensuality and cruelty in their sex, were recalled to my mind very strongly by those before me.

All the classes of disease I met with were essentially of a low type; the patients for the most part young or middle-aged. This especially applied to the ophthalmic cases, which seemed to consist almost entirely of strumous ailments, such as granular affections of the eyelids. These latter I understand are frequent.

In the surgical wards I was shown two operations: one, recent, of strangulated inguinal hernia was doing well; he had been operated on the day previous to my visit;—the other was a man whose great toe had been removed. The dressing used in both cases was a very coarse kind of charpie put on dry, with a piece of wet rag over it. These appliances are indifferent substitutes for water dressing and oil-silk. The ulcers were pale and flabby. The post-mortem room was a good one, suitably fitted up with large marble slabs for the bodies to rest on. Rather unfortunately, it overlooks a little garden—a place as rarely met with here as in Malta—in which the convalescent patients take exercise. The museum I cannot speak as favourably of; it seemed small and poor. Probably, however, it has not been long formed, and will improve. Visits by the hospital staff are made early in the morning. The kitchen appeared to me ill-adapted by its fittings for the wants of so large an institution. It was evident that broths and stewed meats were the articles of diet cooked by the ranges; that such things as roast or even baked meats, chops, &c., were little, if at all, known. Although the mutton is small and lean, very tolerable beef is obtainable. The poor, as in France and Switzerland, seem to live more on veal—the coarser parts—than any other meat, doubtless from its lower price.

Two conclusions I arrived at after going over the hospital. One, that the type of disease must be invariably low, associated with poverty of the blood, prohibiting depletory measures, and demanding the opposite mode of treatment from the very outset. The other was the inadequacy of dietetic means in use to meet these requirements. In addition to deficient nutriment from food, in all probability the class of wines prescribed is not that which possesses body, and malt liquors, I infer, are in this country unemployed.

In closing these remarks, it is only fair to state that much indigence is said to prevail in the lowest order of people; that consequently inmates of the Civil Hospital may be well classified with those met with in the wards of a large English Poor-law infirmary rather than with a well-fed artisan community.

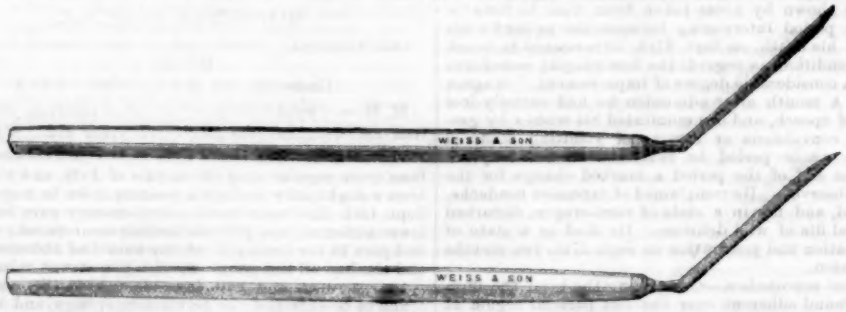
I have said that the salubrity of the city, on the whole, much exceeded my expectations. To this satisfactory condition various agencies contribute. There is no rank vegetation. The sea, highly charged with saline ingredients, moves in a current, though slowly, through the maze of canals, carrying with it animal and vegetable refuse, that in other cities less favourably circumstanced might accumulate in yards, holes, and corners, and generate fever. No mud is uncovered by the tide, which falls, I believe, about a foot in the city itself; and, seawards, the wide open expanse over which the breezes sweep would seem to obviate ill consequences from the action of the sun on the lagoons. A slight smell from the canals is sometimes perceptible in the evenings when the sea is below water-mark—nothing unbearable. Water is brought by pipes from the mainland, a considerable distance, and supplied by public fountains. It is apparently sufficiently abundant. As to its quality I cannot speak positively. It tastes flat, rather insipid, but causes no ill consequences to travellers. There are some old wells yet in use. Mosquitoes are a bugbear to travellers; and if the latter *will* be careless as to precautions, and light their candles and leave the windows open for some time before retiring to bed, they may expect the unpleasant consequences which I one night experienced. But if they take the precaution to shut the window on entering the room, and, for ventilation, reopen it when they have extinguished the candle, annoyance may be avoided. This hint I learned from a Southern States American. The heat of Venice in August is not greater than obtains in London at the like season of the year.

Claverton-terrace, St. George's-road, S.W.

## A NEW CATARACT KNIFE.

BY C. BADER,
OPHTHALMIC SURGEON TO GUY'S HOSPITAL.

To obviate the inconvenience arising from the inward movement of the eyeball, when commencing the corneal incision in the operation for cataract, a new knife has of late been used. It so thoroughly answers its purpose that it can be recommended in preference to other cataract knives. If, standing behind the patient, we wish to operate upon the left eye with the right hand, and upon the right eye with the left hand, two different knives—one for the right and one for the left eye—are required, unless the operator prefers using the right hand only, when the bent knife, used with the right hand for the left eye, may be used for the right eye also, commencing, however, the incision at the outer margin of the cornea. By the employment of the bent cataract knife, commencing the incision at the inner margin of the cornea, great control is obtained over the movements of the eyeball, whether the incision be made




upwards or downwards. The natural inclination of the eyeball to roll inwards towards the nose when operating in the usual manner, instead of being a source of trouble, becomes a help by the use of the bent knife. The blade is somewhat wider than that of von Graefe's knife, the point is in a line with the back, and the blade is bent away from the handle in such an angle as to admit of easy access to the inner (nasal) margin of the cornea.—The knife has been made for me by Messrs. Weiss, of the Strand.

Finsbury-circus, E.C.

# A Mirror OF HOSPITAL PRACTICE,

## BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

### WEST LONDON HOSPITAL.

CEREBRAL TUMOUR; AUTOPSY; REMARKS.

(Under the care of Dr. FERRIER.)

THE following case, which came under Dr. Ferrier's care when he was junior physician to the above-named hospital, illustrates the diagnostic value of the results of experimentation on the brain of monkeys and other animals.

The patient was admitted into the West London Hospital under the care of Dr. Thorowgood, who transferred him to Dr. Ferrier. The case derives further interest and importance from having been commented on in the *St. Petersburger Medicinische Zeitschrift* for Sept. 1874 (p. 474), by Dr. Moritz of St. Petersburg, under whose observation the patient came at the commencement of the disease. The following particulars are partly notes of the patient's condition as observed by Dr. Ferrier, and partly extracts from Dr. Moritz's account relating to his previous history, which his state rendered it difficult to ascertain with any degree of definiteness or accuracy.

J. T——, aged fifty, was admitted on July 15th, 1873, in a state of great emaciation, and unable to stand or walk, on account of a considerable degree of paralysis affecting the right side of the body. He replied to questions with a vacant stare, or answered slowly and with apparent sullenness. Some slight defect in articulation was observed, as well as some difficulty in expression by words. The face was slightly distorted, the mouth being drawn to the left side, and the saliva flowed from the mouth.

On careful and repeated examination of the right side, the paralysis was found to extend only to motion, sensation being unimpaired. The right leg was almost completely paralysed, but the right arm could be raised by voluntary effort so as to bring the hand up to the opposite shoulder, and the fist could be partially clinched.

At first the patient passed evacuations in bed, so as at first sight to give rise to a suspicion of paraplegia, but it was found to depend really on an apathetic or semi-stuporous condition.

The special senses were normal, with the exception, perhaps, of some degree of dulness of hearing. He complained of great headache, felt continually inclined to doze, and seemed to be greatly annoyed when questioned.

The pulse was very feeble, and the appetite was gone, but otherwise there were no symptoms of special importance. Ophthalmoscopic examination by Mr. Vernon some time after admission revealed considerable venous congestion of the optic discs. There was no history of syphilis.

The previous condition is thus described by Dr. Moritz:—"Mr. T——, a strong man, aged fifty years, noticed first on May 14th, 1873, a slight spasm of the right side, which was followed by weakness. This was regarded by himself and his friends as an attack of muscular rheumatism, and treated accordingly. The spasm repeated itself once during the following fortnight, and the weakness of the right limbs began to be permanent, so that, at the advice of a friend, he consulted an electro-therapeutist, and was treated by galvanism for his so-called rheumatism. What was the real nature of the first seizure it is impossible to say, but it is certain that it had not the intensity, and probably not altogether the character, of the succeeding one. A few hours after his return from the first sitting, violent clonic convulsions occurred in the right arm and right leg, which continued for a few minutes, and were followed by well-marked hemiparesis. From this time convulsions occurred at intervals of from three to five days. After the third attack, on June 7th—i.e., three weeks after the first symptoms, and a week and a half after the first attack,—the reporter (Dr. Moritz) was consulted.

"The patient lay in bed with the limbs on the right side in a condition of well-marked hemiparesis. He could not turn in bed; the arm could be raised somewhat, but the leg could not. Sensibility was unimpaired, consciousness was retained, and the patient complained of dull massive headache. The facial muscles were normal. The hemiplegia diminished after a few hours to such an extent that he could walk with the aid of a stick. On the 9th of June, a fourth attack, in two stages—in all about a quarter of an hour's duration—occurred, and was followed by complete right hemiplegia. On June 14th another attack occurred, and another on the 16th. The paralysis again diminished, but not to such an extent as to allow of the patient's walking again. On this day another examination was made,

at which time, in addition to the other facts related, it was found that the cerebral motor nerves, the spinal nerves on the left side, and the sphincters were in normal condition; the special senses were intact, with the exception of a burning sensation on the left side of the tongue, and both ears seemed hard of hearing. The headache, which was tolerably constant, increased gradually when the patient lay on his left side, and diminished on turning to the right. Sight was good on both sides, but no ophthalmoscopic examination was made."

The following is a condensed account of the progress of the case as shown by notes taken from time to time:—During the period intervening between the patient's admission till his death, on Sept. 27th, he remained in much the same condition as regards the hemiplegia; sometimes exhibiting a considerable degree of improvement, but again relapsing. A month after admission he had entirely lost the power of speech, and communicated his wishes by gestures. No convulsions or attacks of vomiting occurred during the whole period he remained in the hospital. Towards the end of the period a marked change for the worse was observed. He complained of excessive headache, refused food, and lay in a state of semi-stupor, disturbed by occasional fits of wild delirium. He died in a state of great emaciation and prostration on Sept. 27th, two months after admission.

*Post-mortem examination.*—On opening the head the dura mater was found adherent over the left parietal region at its upper part. Growing from the dura mater, on the left side of the falx cerebri, was a fibro-sarcomatous tumour, partially ossified, of the size of a goose's egg, which rested chiefly on the postero-parietal lobule of the left hemisphere. This part of the left hemisphere was scooped out and atrophied to an extent corresponding to the convexity of the tumour; while the hemisphere itself was pressed laterally outwards from the middle line as well as downwards and forwards, so as to cause considerable flattening of the convolutions in the frontal and lateral aspects of the hemisphere. The rest of the brain was normal.

*Remarks by* Dr. FERRIER.—The symptoms led me to diagnose a tumour of the left hemisphere, and also to determine its probable position. I found that a similar diagnosis of a tumour had been made by Dr. Moritz, from a paper which had been handed to the house-surgeon, on which were written the following words: "Tumor cerebri in parte superficiali sinistrâ pontis Varolii. Hyperæmiæ periodicæ. Diagnosis non omnino certo, sed valde verisimilis. Therapie: Kali sodat et bromat. Derivantia." Without desiring to call in question the reasonableness of Dr. Moritz's conclusion from the facts he had before him, I formed the opinion that the symptoms pointed rather to a tumour situated on the left hemisphere, and also indicated its special seat. The absence of any signs of interference with the function of the nerves arising from the left side of the pons Varolii, the nature of the paralysis, and the partial and recurrent aphasia, indicated a higher situation of the tumour, the convulsive phenomena receiving an explanation otherwise than from direct irritation of motor strands. From the fact that the voluntary movements of the leg were most affected, I pointed to the upper parietal region as the probable seat of the growth, but reserved an opinion as to how far other centres were involved in structural change. The post-mortem examination justified the correctness of the diagnosis. The cortical region specially involved (the postero-parietal lobule) corresponds to the region in the brain of the monkey concerned in movements of the leg and foot. Hence the marked loss of voluntary control over these movements observed in the patient during life. The paresis of the hand and arm, and also the partial aphasia, receive their explanation by functional interference with the arm and speech centres, caused by the pressure exerted by the tumour, as indicated by the flattening of the convolutions. The arm centres, situated in the convolutions bounding the fissure of Rolando, and the speech centre, known as Broca's convolution, were involved in the flattening, as well as the mid-frontal convolutions which govern the facial muscles. In this condition we have an explanation of the partial affection of movement and function of articulate speech. The functions of the brain centres are specially dependent on the integrity of their circulation and nutrition. The effect of such an increase in the intracranial pressure, as caused by a tumour of such size, was to cause considerable impairment in the circulation. Hence, in addition to the special symptoms recorded, the apathetic condition and continual tendency to sleep were caused, essentially from the anæmic state of the hemisphere. The stage of irritation, as indicated by the unilateral convulsive seizures, had been passed before the patient's admission to the hospital, and the gradual tendency was to induce more extended and complete paralysis as the tumour increased in size. The case from the first was seen to be hopeless, and the treatment was directed to relieve symptoms and keep up nutrition.

## MIDDLESEX HOSPITAL.

### MENORRHAGIA; GRANULAR OS AND CERVIX; UTERO-GESTATION.

(Under the care of Dr. ARTHUR EDIS.)

M. M——, aged thirty-two, married fourteen years, with four children, the youngest three years old. When first seen in September, 1873, she stated that the catamenia had been quite regular until the middle of July, and there had been a slight show and much bearing down in August. On Sept. 13th she experienced severe crampy pain in the left lower abdomen, and profuse flooding commenced; retching and pain in the lower part of the back and abdomen set in, and she had all the symptoms of a threatened miscarriage.

On examination a few days afterwards the uterus was found to be enlarged, the cervix soft, spongy, and intensely granular. Nitrate of silver was applied, and rest enjoined, and, as the patient was very nervous and restless at night, chloral hydrate with bromide of potassium was prescribed. On driving home the same day the cab ran against another vehicle, and was nearly upset. The patient was carried upstairs in a fainting condition, her clothes saturated with blood, and the hæmorrhage continuous. She was seen immediately afterwards, and was found to be in a very prostrate condition. As she was still losing blood, and it seemed more than probable that the ovum had been expelled (nothing definite being ascertainable by a local examination), large doses of ergot were given, and endeavours were made to rally her by stimulants. The hæmorrhage ceased in a few hours, and, after remaining in bed for a week or ten days, she resumed her ordinary avocations, bark and acid being prescribed as a light tonic.

In the middle of October, whilst sitting quietly in the Polytechnic, she felt a sudden gush of blood and watery discharge. She was driven home, and when seen was in a very exhausted condition, faint and sick. On examination, the uterus was found to have increased in size; in fact, there seemed little doubt that utero-gestation was still going on. The cervix being still very granular, a strong solution of nitrate of silver was applied, and absolute rest was enjoined. After a few days quinine-and-iron was given, the cervix being touched with the nitrate of silver about once a week until the granular condition was relieved.

After this she improved in health, and went her full time, being delivered at the end of March last of a fine girl.

The points worthy of note in this case are—the recurrence of severe flooding on three or four occasions, the presence of granular disease of the cervix, the free application of nitrate of silver, and the employment of ergot in large and continuous doses on one occasion (about the second month), without interfering with the progress of utero-gestation. The employment of the nitrate of silver and of ergot was not undertaken unadvisedly or in ignorance, but with full knowledge of the condition and its contingencies. If carefully employed, there is everything to gain and nothing to lose; for if abortion result, it would have been more likely to occur had no treatment been resorted to; and when it does take place it is in spite, and not in consequence, of the treatment.

## NORTH LONSDALE HOSPITAL, BARROW-IN-FURNESS.

### SEVERE COMPOUND COMMINUTED FRACTURE OF RADIUS AND ULNA; SIMPLE FRACTURE OF HUMERUS; AMPUTATION OF FOREARM; RECOVERY.

(Under the care of Dr. SINCLAIR.)

THE occurrence of cases like the subjoined raises a question which has not hitherto been answered as positively and definitely as may be wished—namely, at what point

amputation should be performed when there is severe laceration or a compound fracture in the distal portion of a limb, with a simple fracture in the proximal portion of the limb? Should amputation be performed at or just above the seat of the laceration or compound fracture, or should it be done high up at the seat of simple fracture? There are some who recommend the adoption of the latter course, on the supposition that there is not, as a rule, sufficient reparative activity to heal the stump and repair the fracture; while others advise amputation only at the seat of compound fracture, leaving the simple fracture to be dealt with in the ordinary manner. Mr. Erichsen says that "the proper course to adopt in such a case as this would mainly depend on the conditions of the intervening soft parts. If these be sound, free from extravasation, not contused or lacerated, the limb may with safety be removed just above the lower fracture, the upper fracture being treated on ordinary principles. But if there is extensive bruising of the limb, with ecchymosis or deep extravasation between the fractures, then it would clearly be useless to amputate low down, as not only would the stump have to be formed of tissues in a state of disorganisation, but the inflammation set up at the seat of operation would speedily spread into the structures filled by extravasation, and, setting up unhealthy suppuration in these, would spread upwards to the higher fracture, converting it into a compound one of the worst kind." This is, undoubtedly, the best practice, the soundness of which is well illustrated in the following case, for the notes of which we are indebted to Mr. H. B. Vincent, house-surgeon.

William P——, a shipwright, aged thirty-six, married, was admitted on October 7th, suffering from a very severe compound comminuted fracture of the left radius and ulna, extending into and freely exposing the wrist-joint, together with severe contusion and laceration of the entire palm and of all the soft parts on both aspects of the forearm in the immediate vicinity of the fracture; also a simple transverse fracture in the middle third of the humerus of the same arm. Very severe hæmorrhage was going on when he was admitted. The accident was caused by the hand being drawn in by some very powerful and rapidly-revolving machinery, by which the patient sustained the injuries about his hand and forearm, whilst the suddenness and the violence with which he was snatched from the ground caused the fracture of the humerus.

Primary amputation of the forearm was performed in the ordinary way, about three inches below the elbow-joint. Esmarch's apparatus was not used, in consequence of the fracture above. Petit's tourniquet was used on the brachial artery. The fracture was put up in four softly-padded splints.

The man did very well, notwithstanding that he always took a desponding view of his state. His temperature was never higher than 101·2°, nor was his pulse more than 96. His bowels were not open until the seventh day. He took the ordinary diet of the hospital at the end of a week. On the ninth day all the ligatures and sutures had come away. With regard to the fracture, on the day after the operation the splints had to be removed, in consequence of the pressure on the flaps, and his arm was laid upon a pillow; and from the fact that at every dressing of the stump, notwithstanding that every care was used, some movement took place in the fracture, so that on the thirteenth day after the operation there was no sign of union. On that day (Oct. 20th) the fracture was then securely put up in splints. On Nov. 4th, twenty-eight days after the operation, the case was as follows:—Fracture firmly united, the cicatrix on the stump nearly healed up, and there was slight passive motion in the elbow-joint. The patient was up and about.

## SALFORD ROYAL HOSPITAL.

### ANEURISM OF THE FEMORAL ARTERY; LIGATURE OF EXTERNAL ILIAC.

(Under the care of Mr. WALMSLEY.)

S. T——, operative baker, aged forty, married, was admitted June 25th. He was of spare habit; height 5 ft. 5 in.; weight 8 st. 10 lb.; very little fat on the body; muscles thin and flabby; aspect pale, sallow, and unhealthy; face much marked with acne; temporal arteries prominent and tortuous; no arcus senilis; pulse feeble and frequent; heart sounds natural; urine normal; family history imperfect. Fourteen years ago the patient had a chancre, and also a suppurating bubo in left groin, but he never had any secondaries. In March last, when lifting a sack of flour, he gave himself a "kench," and felt as if he had strained something in his left groin. Four days after he perceived a small lump in this region, which slowly increased in size. A fortnight later he became conscious of pulsation in the tumour, accompanied by pain, especially when in bed. About a fortnight before admission the swelling had increased greatly, and the pain was very severe. He could scarcely walk to his work, which, however, he continued to attend to till June 21st.

When examined on day of admission the tumour was very large, the pulsating area being 7¼ in. by 5½ in.; it overlapped Poupart's ligament, filled entirely Scarpa's triangle, and extended into middle third of thigh. Pulsation, purring thrill, expansion, and bruit were all well marked. The entire extremity was œdematous and the superficial veins enlarged and varicose. He felt the limb to be weak, cold, and numb.

June 29th.—During the last four days the tumour had increased rapidly. Owing to its great size, and considering the condition of the limb, an attempt at cure by compression was deemed unadvisable. At 4 P.M., the patient being under chloroform, the external iliac was tied. The operation was the ordinary one, with incisions transverse to the artery, and was free from any special difficulty. The superficial epigastric vein bled freely, and had to be tied. The superficial epigastric artery was not met with. The genito-crural nerve was well seen after the internal oblique and transversalis muscles had been separated from Poupart's ligament. A carbolised catgut ligature was used, the wound closed with two wire sutures, and dressed with carbolic oil.

In the first four days after operation the wound seemed to be healing by primary adhesion. On the fifth day (July 4th) a sharp attack of erysipelas set in, which yielded in a few days to tincture of perchloride of iron and port wine. From this period the recovery was steady and continuous.

At his own urgent request the man was made out-patient on August 8th, having recovered perfectly the use of his limb, which had assumed a natural appearance, and the tumour being reduced to one-third its original dimensions, and quite free from pulsation. He has not, as desired, presented himself at the out-patient room since leaving the hospital. Had any untoward symptom occurred, it is fair to infer he would have done so.

# Medical Societies.

## ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

AT the meeting of this Society on the 24th inst., Dr. C. J. B. Williams in the chair, a very interesting paper by Geo. G. GASCOYEN, F.R.C.S., entitled "Cases of Syphilitic Reinfection, with Remarks," was read, and provoked an animated discussion. The author commenced by giving the details of eleven cases of syphilitic reinfection which had passed under his observation, and seven of which he had himself treated for both diseases. Ten of them had previously had general syphilis, and in six of these constitutional symptoms again manifested themselves; while in the other four an indurated chancre only was the evidence of a second contamination. The remaining case was one of well-marked indurated chancre with inguinal adenopathy for the first disease; but the reinfection showed itself as an indurated chancre followed by tertiary lesions, without the intervention of any of the secondary affections. The importance of these cases was dwelt upon as evidence that the diathesis created by syphilis may completely wear out and leave the individual free from all trace of his former attack, so that he may become the parent of healthy offspring, and be liable to contract again the disease if exposed to contagion. That examples of syphilitic reinfection cannot be

so rare as is commonly supposed was proved by a table appended, in which sixty cases had been collected from various sources; and in most of them, as well as in those which formed the subject of the communication, a full mercurial treatment had been employed; they afford strong testimony to the value of the drug, not only as a remedial but actually as a *curative* agent in this disease. The author endeavoured to show from these cases what is the real meaning of the induration which commonly accompanies an infecting chancre. He does not regard it as one of the strictly local processes attendant upon, or essential to, the development of such a sore, but as the first of the so-called secondary symptoms—the earliest expression of a constitutional contamination—which usually manifests itself at the point of inoculation, and which is as pathognomonic of a general taint as any of the affections admitted to be secondary. In most of the cases related the sore followed at once upon intercourse, and it was urged that a period of incubation is by no means necessary to the evolution of an indurated chancre. Much difference of opinion exists on this point, and the author considered that the presence or absence of incubation is determined by the nature of the lesion from whence the chancre has been derived—whether from an infecting sore which is still suppurating and in full local activity, or from an indurated chancre which has become indolent and has ceased to form pus. In the former case, which is regarded as an example of *primary syphilitic inoculation*, no incubation preceded the pustular origin of the chancre; but in the latter, which constitutes an example of *secondary syphilitic inoculation*, a period of incubation always precedes the papular development of the resulting sore; and as the phenomena which have been observed to follow the inoculation of an indurated sore are precisely the same as those which attend the successful inoculation of mucous tubercles or of syphilitic blood, in a person previously healthy, the fact is considered to afford an additional reason for placing a non-suppurating indurated chancre in the category of secondary syphilitic accidents. Some of these cases of reinfection were said to throw light upon the position which the more remote lesions following upon syphilis really occupy with regard to the disease. Six of the cases recorded (one of the present series and five given in the accompanying table) occurred in persons suffering at the same time from tertiary syphilis; and it is sought from this circumstance to show that some of the more advanced symptoms must be the sequelæ of a past, and not the manifestations of a still existent disease. For since it is impossible to believe that two distinct attacks of general syphilis can take place in the same individual at the same time, these later manifestations, characterised by cachexia, ulcerations, &c., which existed when the second contagion took place, must be due to the injury inflicted upon the economy by a previous disease; and the fact that a fresh infection can take place under such circumstances would seem to be convincing proof of the accuracy of such an assumption.

In the discussion which followed, Mr. HENRY LEE said he entirely agreed with Mr. Gascoyen as to the secondary reinfection, and he had himself published a case of this kind. He thought the sore of reinfection did not produce the same induration as the primary sore, nor were the glands affected in the same way in the former, suppuration very often taking place, the secondary symptoms being very mild and yielding readily to treatment. The speaker was of opinion that no distinct time could be pointed out when a person was deemed free from syphilis, but that the disease passes off gradually.—Mr. ACTON doubted whether all the cases brought forward in the paper showed reinfection, as the secondary symptoms ten years after the primary affection, assumed by Mr. Gascoyen to be reinfection, might really be a return of the first infection. He thought secondary symptoms very difficult to inoculate.—Dr. DRYSDALE had only once seen a similar case to those of Mr. Gascoyen's. He did not consider induration always a sufficient proof of reinfecting sore, as it might be tertiary, a mistake commonly made; and thought it impossible to have a new primary sore at the same time as tertiary symptoms. He did not hold that tertiary manifestations are simply constitutional lesions, as women with tertiary syphilis have given birth to dead children. The dualistic theory was, in his opinion, the correct one; but he thought the facts brought forward in the paper were calculated to shake it. He asked Mr. Gascoyen whether he believed syphilitic fathers ever beget syphilitic children without the mother ever being affected. With regard to the inoculation of secondary symptoms, the speaker drew attention to persons infected on the lips, and thought prostitutes must propagate the malady by the contagion of secondary symptoms.—Dr. THIN referred to the experiments made in Vienna with regard to inoculation, given in the last book on syphilis by Prof. Zeissl, containing also data of von Barensprung, and thought the curative action which iodide of potassium exerted on tertiary symptoms proved they were specific.—Mr. TROTTER (Coldstream Guards) did not understand why these cases should be looked upon as so rare, as he had always considered them recognised facts in the army. He did not believe in the dualistic theory.—Mr. GASCOYEN, in his reply, said he was glad to hear every speaker agree with him as to the possibility of syphilis reinfecting the system. He would fix no definite time for the ending of the disease, but pointed out the few children that are born with syphilis in proportion to the people that have been infected. To Dr. Drysdale's question he replied in the negative.

The meeting adjourned after Dr. Sansom had exhibited his Discs for Hypodermic Injections.

## MEDICAL SOCIETY OF LONDON.

THE proceedings on the 16th inst. (Mr. Victor de Méric in the chair) opened by the President reading a letter from the widow of the late Dr. Anstie thanking the Fellows of the Society for their sympathy in her sad loss. The President also said he had received a favourable report concerning the health of Mr. Peter Marshall.

Mr. WOODHOUSE BRAINE then showed a lad of eighteen with a large Hypertrophied Fold of the Mucous Membrane of the Upper Lip on each side of the frænum. There was no family history of any like growth.—The PRESIDENT, Mr. NAPIER, Dr. FAYRER, and Mr. SEWELL made a few remarks, the two last-named speakers touching principally on the connexion of those growths with a scrofulous diathesis.

Dr. CLEVELAND being unavoidably absent, the following case of his was read by Mr. BRAINE. A lady, aged seventy-four, had a small swelling or wart on the skin of the abdomen which had existed since her earliest recollection. She was advised to have it removed, bleeding having taken place on one occasion; but to this she would not consent. Some pain and uneasiness in the growth having subsequently come on after a journey, Dr. Cleveland was requested to see her. In the course of three or four days the tumour had a melanotic appearance, and was pronounced to be cancerous by Sir James Paget. It was removed by the knife, and the patient has since done well.—A short discussion followed, in which Dr. WILTSHIRE, Dr. FOTHERGILL, the PRESIDENT, and Dr. ROUTH took part, and which mostly related to the difficulty of diagnosis between innocent and malignant growths.

A paper, entitled "Something New (or supposed to be so) in Dental Surgery," was then read by Mr. NAPIER. The author related a case lately under his care, in which the teeth in both jaws being reduced by mercurial salivation and other causes to the condition of sharp jagged spikes, productive of much suffering and discomfort, and anæsthesia in any shape being objected to, he had employed an original form of treatment, giving rise to no pain. The process of filing having been satisfactorily accomplished by means of the ether-spray locally applied, he cautiously and very gently touched the exposed portion of the nerve of each tooth successively with a pencil of hickory-wood dipped in nitric acid, by which simple method it was rendered insensate, and the mouth prepared for the reception of artificial substitutes. Mr. Napier was anxious that the principle involved should receive a fair share of attention, as he held the present system of nerve-demolition to be at variance with true science, and concluded his paper by expressing his conviction that the whole profession would

be much benefited if dentistry were made part of the curriculum of every student, and studied, not as a specialty, but in a fitting and well-organised department of every general hospital.—The paper did not provoke a very lengthy discussion; however, after Dr. CRISP and Dr. R. J. LEE had made a few remarks, Mr. SEWELL said he did not agree with the author's preliminary remarks, and thought the paper ought to have been brought before the Odontological Society. He would have imagined the application of nitric acid in this case to have produced exquisite suffering.—Mr. NAPIER briefly responded.—The PRESIDENT then remarked, that as dentists were admitted as fellows of the Society, their papers would always be received with pleasure; and the fellows present testified their approval of this sentiment.

Dr. R. J. LEE read an elaborate paper on Maternal Impressions. He commenced by giving an example of this class of cases, and the value of a system of classification of abnormalities in the fœtus according to anatomical details was shown to be useful in establishing the view that such abnormalities follow certain physiological laws, but that this system does not attempt to explain their cause. The necessity of defining what we mean by maternal impression was pointed out as the first step towards explaining the manner in which an impression can affect the child. There appeared to be certain effects which followed purely emotional disturbances, and others which were the consequences of impressions produced by objects of fear and disgust; while between purely emotional and objective impressions there were a great variety which affected the emotions and the senses simultaneously. Experience proved that the first and last of these classes of impressions were more commonly stated to be causes of various abnormal conditions in the child, and that such effects were exhibited in some deficiency of its intellectual and moral nature rather than in deformity or abnormality of special organs or parts of its body. In illustration of the truth of this view, a few cases were recorded, and Dr. Lee concluded by recommending it to the attention of the members of the Society as of greater importance than that which attempts to connect particular kinds of deformity with the object which was stated to have produced an impression on the mother.—A discussion followed, in which Dr. J. BRUNTON, Dr. SUTHERLAND (visitor), Dr. FOTHERGILL, Dr. CRISP, and Mr. GANT took part; all the speakers (excepting Dr. Brunton) believing in maternal impressions and giving examples occurring both in the human being and in animals.—Dr. LEE then responded at some length, and the meeting adjourned at a late hour.

## OBSTETRICAL SOCIETY OF LONDON.

THE usual monthly meeting of this Society was held on Wednesday, November 4th, E. J. Tilt, M.D., president, in the chair.

The following gentlemen were elected Fellows of the Society:—Edward Barber, L.S.A. (Sheffield), John Barclay, M.D. (Banff), Wm. Thos. Greene, M.A., F. John Hannan, M.B. (Woking), Dean Langriff, M.R.C.S. (Penge), Wm. Hill Payne, M.R.C.S. (Peckham), Albert John Venn, M.R.C.S., Harry Wells, M.D., Entre Rios, and David Young, M.D. (Florence).

Mr. CHURTON related the particulars of a case of Recto-Vaginal Fistula, caused by a Zwanck's pessary, in which a patient aged sixty had worn one for two years. A rent large enough to admit two fingers existed at the time of the removal of the instrument. This closed up nearly entirely, without operative interference, in about two months.—Dr. ROUTH observed the case cited showed how necessary it was to know how long such instruments should be retained. The time was nowhere laid down in works on gynæcology. He himself had seen an instance where a globular pessary was retained for five years, and then had to be removed with forceps. He had known also of two cases in which Hodge's pessaries produced fistulæ. His rule was to keep them in for three months at the utmost, and then remove them for a few days before reintroduction; but usually he preferred six weeks.—Dr. ROGERS said that no matter how judiciously rules might be laid down in books for guidance of medical men using pessaries, they would not be observed by patients, partly from forgetfulness or misapprehension of the advice given, partly from nervousness and dislike to be frequently examined, especially when feeling pretty comfortable while wearing the instrument. On one occasion he had removed one of the old boxwood pessaries placed within the patient twenty years before by the president, Dr. Tilt. He had operated on other cases for removal of both Hodge's and Zwanck's pessaries, as also for fistulæ caused by them. He thought Zwanck's pessary a most useful instrument if removed every night and its use discontinued for a time if necessary.—Dr. CLEVELAND thought that, as it was improbable that a pessary would suddenly make its way through the vaginal wall into the rectum or bladder, the best rule of practice would be to direct the wearer of an instrument to present herself as soon as she experienced any unusual irritation or pain therefrom.—Dr. HOPE mentioned a similar case that had occurred to him in the out-patient department at St. Bartholomew's, where a large vesico-vaginal fistula existed as a result of wearing a Zwanck's pessary for fourteen months.—Dr. BRUNTON thought the cases were so interesting they ought to be put on record. He had no personal experience of such cases himself.—Dr. EDIS alluded to a case where he had extracted, with considerable difficulty, a large ball-pessary from a patient who had worn it for eleven years, the whole of the vagina being in a state of granular ulceration. In several other instances he had removed instruments imbedded in the vaginal walls, that had caused more or less inconvenience.—Dr. TILT thought these cases should be noted in the Transactions, as a warning to others.—Dr. WILTSHIRE mentioned a case which came under his care at St. Mary's Hospital, in which a Zwanck's pessary caused fistulous openings between both the bladder and the rectum. He thought that if a rule were laid down, it should not depend on time, but on the supervention of symptoms of discomfort, discharge, &c. He regarded gouty women as very intolerant of pessaries, incrustations rapidly ensuing in such persons. He thought every patient should have clear instructions given to her respecting these instruments, and that Zwanck's pessaries might produce dangerous symptoms.—Dr. GERVIS feared that Dr. Wiltshire's suggestion would not prevent all risk, as on more occasions than one he had removed a Hodge's pessary, on finding ulceration of the vagina present corresponding with one or other of its bars, and yet the patient not conscious of any inconvenience, and complaining only of some leucorrhœal discharge.—Dr. PALFREY remarked that there was often great trouble without many symptoms. In one case, eighteen months after the introduction of a pessary, there was a sudden gush of urine, from the pessary having forced its way into the bladder. The patient denied all previous symptoms. He made it a rule with hospital patients to have them removed once a month by the nurse, who then employed the douche, and if no harm had resulted, the clerk reinserted the pessary. He considered the old-fashioned Hodge very bad, Dr. Greenhalgh's modification being a great improvement. He regarded Zwanck's pessary as very dangerous.—Dr. HAYES referred to a case he had brought before the Society, where a Hodge's pessary had become imbedded in the vaginal wall.

Dr. CHARLES CARTER exhibited a Fœtus born 172 days, or twenty-four weeks and four days, after marriage. The patient, aged twenty-six, was married on May 3rd, 1874, menstruation ceasing the last day of April. There had been a coloured discharge for one day at the usual time in the month following. Delivery took place prematurely on Oct. 22nd. She had never experienced any fœtal movements. The fœtus weighed 1 lb. 6 oz., was 12 in. long, of a dark-red colour, with abundant hair on the head, and down on the cheeks. It cried loudly several times, passed meconium of a greenish-black colour, and urine whilst being washed, and lived for twenty-one hours. A little milk-and-water was given to it during life. The nails were well formed on the fingers, reaching almost to the ends. The eyelids were agglutinated together; on tearing them open the pupillary membrane was distinctly seen. The right lung was perfectly expanded, but only the upper lobe of the left. The testes were lying midway between the kidneys and the internal ring. There was a centre of ossification in the os calcis, but

none in the astragalus; centres of ossification also existed in the first three pieces of the sternum. The fœtus was not more than six months old, if so far advanced.—Dr. ROUTH thought it was important that the case should be carefully investigated. Two points of importance seemed to have been omitted in the account—namely, the commissures of the brain and the valvulæ conniventes.—Dr. BRODIE mentioned that he had lately met with a similar case. A lady was confined at the end of six months and a week; the fœtus was living and cried well; it swallowed with a little difficulty and lived five hours.—Dr. WILTSHIRE also mentioned a case of twins at the fifth month, where one lived three or four hours, the other twenty-four hours.—Dr. CLEVELAND hoped that every means would be taken to ascertain the precise date of conception, as the main interest of the communication depended upon that point. Certainly the date of marriage, although of great value, was not always to be relied upon as preceding that of conception.—Dr. BARNES stated that in these cases we did not find the lungs completely expanded. As to the reputed age, he remembered an anecdote of the elder Rigby, who said that he had often met with instances of well-developed children born within seven months of marriage, but only with the first.

Dr. HOGGAN demonstrated the Structure of the Decidua in Cystic Degeneration of the Chorion by means of several microscopical specimens, prepared by Mrs. Hoggan, M.D., from a case of miscarriage at the end of the sixth week, under her care, with explanations by her. The decidua caduca was seen to have no connexion with any hypertrophy of the uterine mucous membrane (if such exist), but that it was really a typical specimen of embryonic tissue, formed probably by exudation, and at this stage of growth the embryonic cells, embedded in intercellular substance, had scarcely begun to differentiate themselves into the future tissues; enough progress had, however, been made in the cells, forming themselves into rows, to show development to be proceeding. The cystic degenerated ovum was of the size of a hazel-nut, covered with villi, and embedded in decidua, which were destroyed in dissecting it out. The cyst-wall was treated with silver, but nothing but fluid was found inside. Endothelium was seen in different stages of growth, which seemed most active where the largest villi formed a sort of pedicle for the cyst. In the same field of the microscope could be seen the separate embryonic cells on dark-ground substance, passing by growth and junction into the so-called lymphatic lacunæ, and these again passing by vacuoles into the regularly shaped endothelium cells lining the cyst-walls.—Dr. MADGE inquired whether the villi of the chorion were examined; death was due probably to changes taking place in these.

Dr. HEYWOOD SMITH exhibited two new pairs of Rat-trap Forceps, to aid in the removal of growths &c. from the uterus, or to be used as vulsella during ovariotomy. One was similar in construction to the ordinary pile forceps; the other pair were constructed specially for the removal from the uterus or vagina of large fibroid tumours or polypi after they had been detached. They were made in two parts (as midwifery forceps), and when in position could be locked. The inner surface of the blades was armed with teeth pointing towards the handles, rendering their introduction easy and their slipping difficult.—Dr. MEADOWS thought the forceps were likely to be of great use. On two or three occasions he had been obliged to leave the tumour in utero after detaching it, as he could not extract it for want of suitable forceps, the cervix not being sufficiently patulous to allow of digital manipulation.—Dr. PALFREY confirmed Dr. Meadows's experience. In a recent case of a large fibroid a firm hold by Dr. Marion Sims's new hook was obtained, but all attempts to withdraw the tumour were vain, and at last Dr. Barnes's long forceps were employed. There was one defect in Dr. Smith's forceps; they did not lock in the handle.—Dr. WILTSHIRE asked why in such cases as Dr. Palfrey alluded to, those in which removal of an already separated fibroid was impossible on account of its large size, the tumour could not be cut up into small sections by means of the wire écraseur.—Dr. GERVIS stated that he had on several occasions adopted the plan referred to by Dr. Wiltshire with complete success. Finding after severing fibroids from their attachment that they were too bulky to be drawn through the cervix or the vulva, as the case may be, he had divided them transversely with Weiss's écraseur, and found their removal then sufficiently easy. He could recommend this plan as preferable to such prolonged traction with forceps as spoken of by Dr. Palfrey.

Dr. ALFRED MEADOWS exhibited a specimen of the Membrane passed in a case of so-called Membranous Dysmenorrhœa. Remarking upon the intractable character of these cases, he invited the opinions of the Fellows of the Society on their pathology and treatment. — Dr. AVELING believed that the membrane exhibited was the nidal decidua or lining of the uterus, which is periodically shed, increased in thickness and toughness by hyperæmia of the organ. He had ventured to call this hypernidation. Mercury had been found to prevent this abnormal condition during the time of its administration. The rational remedies were those which reduced the supply of blood to the uterus.—Dr. HAYES inquired what appearances were presented under the microscope.—Dr. WILLIAMS inquired whether any trace of glandular tissue had been noticed. He had examined several, and found it present. Fatty degeneration of the lining membrane took place before the catamenial period. The tissues around were injected, but the uterus was not enlarged. Though mucous shreds were passed, the condition was due to an altered nutrition of the uterus itself. It was not congestion, but was analogous to some skin eruptions, and was not the product of inflammation. Chlorate of potass had been tried, points of this substance being left in the uterus, which cured it for the time. — Dr. MADGE remarked that Dr. Williams spoke of the mucous membrane lying loose. He would ask what was the condition of the wall beneath?—Dr. WILLIAMS replied that it was the same as in the uterus when menstruation had nearly ceased.—Dr. BARNES thought there was no naked-eye evidence of glandular tissue. A lady medical student brought him a specimen she had passed herself, remarking that she had read they only occurred where sexual intercourse had taken place. This had not happened in her case. He thought the membrane occurred in consequence of hyperæmia, apart from gestation. The mucous membrane was not necessarily shed.—Dr. HOGGAN remarked it was easy to prepare a specimen and let the Fellows see for themselves whether it was an exudation or not.—Dr. HAYES inquired whether there were any traces of the Fallopian tubes in the mould of the uterine cavity that Dr. Meadows spoke of?—Dr. GERVIS could recollect no case of membranous dysmenorrhœa in which extreme uterine congestion was not an abundant and probably antecedent condition, and the treatment that he had found to succeed the best strengthened this view. They were generally very tedious cases, but he had found local depletion by scarification, and the internal use of the bichloride of mercury, together, very frequently effect a cure.—Dr. RASCH alluded to a case where a complete cast of the uterus had been passed.—Dr. BRUNTON suggested that there might be an element of syphilis in these cases, as several Fellows had stated that the treatment which gave best results was mercury in some form.—Dr. HEYWOOD SMITH inquired if Dr. Meadows had employed the intra-uterine application of pernitrate of mercury.—Dr. TILT stated that some years ago he had published some cases of this disorder. There was one point to which sufficient attention had not been paid. Independently of the body of the uterus being the source of the disease, the irritation and congestive state of the cervix was due to the irritation set up by the attempt to pass the membrane. In one case it was followed by acute inflammation. In regard to treatment, he had injected tincture of iodine in several cases, in two successfully. It was an important point to bear in mind the congestion of the uterus. As for Dr. Brunton's suggestion, he had never heard it mentioned before, and did not believe it.—Dr. MEADOWS, in reply, expressed his dissent from the view that these cases are due merely to an active state of uterine hyperæmia. He did not dispute that this condition existed in most, if not all, of these cases, but there must be something more than this, for uterine hyperæmia was a very common condition, whereas membranous dysmenorrhœa was a comparatively rare disease. He believed it was essentially a constitutional affection, not a merely local disorder. In regard to therapeutics, he knew of no certain remedy. All those which had been mentioned, and many more, he had tried in the present case without the slightest success; iodine, mercury, iron, cod-liver oil, local depletion, and other local remedies, had signally failed. He believed that many of these cases were

practically incurable.—Dr. Williams and Dr. Aveling were requested to report further on the case.

Dr. GERVIS read a paper on the subject of Retroversion of the Gravid Uterus, relating the particulars of two fatal cases, as also of a third which only just escaped being fatal. Dryness of the skin was a prominent symptom in all the cases, and absence of any head-symptoms. In the first case miscarriage occurred a few hours after the reposition of the uterus, and death on the following day. Complete retention had existed for three or four days. In the second case, retroversion with retention had been present for a fortnight. Six pints of extremely offensive bloody urine were drawn off. Death ensued the day following reposition of the uterus. In the third case, retroversion probably took place three weeks before, with retention more or less complete, micturition only being accomplished with much difficulty and straining, in small quantities at a time. Three quarts of water were drawn off, and the uterus replaced in the knee-shoulder position. Inability to retain the urine persisted for ten days, but the patient ultimately did well.—Dr. BARNES suggested that, as, at the late hour at which the paper had been read, it was impossible to do justice to so important a subject, it would be well to postpone the discussion to the following meeting of the Society, a suggestion which was ultimately adopted.

# Reviews and Notices of Books.

*Journal of the Chemical Society.* Containing the Papers read before the Society, and Abstracts of Chemical Papers published in other journals. Edited by HENRY WATTS, B.A., F.R.S. London: Van Voorst.

FOR more than thirty years the Chemical Society of London has done good service to science. It has attained to the position of a large and powerful society. It is well organised, and has been uniformly well managed, and a vast mass of important chemical research has been given to the world under its auspices. Its Journal has been quoted with respect in all parts of the world, and has contained papers by almost every English chemist of distinction. And yet it may fairly be questioned whether anything else that the Society has accomplished has been equal in real scientific value to the unostentatious achievements of the last three years. In the spring of 1871 the Society commenced the publication of its monthly Journal of systematic abstracts of all important papers bearing on chemistry which appeared in any part of the world. This enormous labour was confided to Mr. Henry Watts, F.R.S., the editor of the Society's Journal, the well-known translator of Gmelin, and author of the great English "Dictionary of Chemistry." He has from the first been assisted by a staff of about thirty abstractors, all well-known chemists, and the result has been that the work has been done with an accuracy and completeness which leave no room for improvement. The abstracts are classified under the following heads:—General and Physical Chemistry, Inorganic Chemistry, Mineralogical Chemistry, Organic Chemistry, Physiological Chemistry, Chemistry of Vegetable Physiology and Agriculture, Analytical Chemistry, and Technical Chemistry. More than 1500 abstracts appear under these various headings in last year's volume, and when we consider the number of the periodicals which have to be digested, and the great length and complexity of many of the papers, the magnitude of the work seems almost appalling, and we cease to wonder that the volume extends to 1350 pages. The abstracts are carefully and well done. Some are lengthy, and give almost every fact contained in the original paper. Some are short, giving merely the final results reached by the authors, and some give only the title of the papers, but this is only when the papers are but of slight importance, or have but an indirect bearing on chemistry. Each branch of the subject is kept separate from the rest, so that the physiologist, for example, has only to run his eye down the table of contents to meet with a record of every important discovery in physiological chemistry made in the month or year. The labour thus saved to the advanced student and the investigator is incalculable. To the latter particularly, who so often experiences the bitter disappointment of finding that his fancied discovery, the fruit of months of patient toil, has already appeared in some out-of-the-way French, German, or Italian journal, the Chemical Society's abstracts will be peculiarly valuable, and he will willingly agree with us in reckoning the English Journal as the most important of all works on chemistry.

The advantages which English scientific men enjoy have to some extent been in the hands of the Germans for more than a quarter of a century. The well-known "Jahresbericht" is an admirable digest of chemical discovery, and is quite equal in extent to the English Journal. Its value is, however, much diminished by the fact that it is never less than two years behindhand in its appearance, and it is, moreover, inferior in plan in some respects to the English work. Most chemists who read German will use both works; but even if an English translation of the "Jahresbericht" were published, it could not compete in utility with the Journal of the Chemical Society.

We may add that the Council of the Chemical Society have decided to permit the general sale of the Journal at a price (21*s.* per annum) of which none can complain.

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*The Principles and Practice of Veterinary Medicine.* By WM. WILLIAMS, M.R.C.V.S., F.R.S.E., &c., Principal of the New Veterinary College, Edinburgh. Edinburgh: Maclachlan and Stewart. London: Simpkin, Marshall, and Co. 1874.

IN the volume which was published two years ago by Mr. Williams the diseases which attack the external structures of the lower animals were dealt with in a very clear and comprehensive manner. The illustrations were numerous and remarkably well executed. Altogether we felt justified in expressing an unqualified approval of the work, and our estimate of its value is justified by the fact of a second edition being now in course of preparation.

The present volume lacks some of the qualities which gave character to its companion; the illustrations are very few in number, and the treatment of some of the most important subjects is hardly so complete as it might have been.

Contagious diseases of animals, including cattle-plague, pleuro-pneumonia, foot-and-mouth disease, cow-pox, sheep-pox, glanders, and farcy receive but little attention, considering their importance in reference to sanitary police measures. It may be said, however, for the author, that it is impracticable to discuss in a satisfactory manner the whole of the maladies to which veterinary patients are liable in the space of something less than seven hundred pages.

The first part of the book is devoted to a consideration of General Pathology, as applicable to the diseases of animals. Causes, symptoms, and results of disease, with the different modes of death, are explained in accordance with modern views. In the second part, the various diseases are classified under the heads of Contagious and Non-contagious. Mr. Williams has taken advantage of his acquaintance with medical writers, and in all doubtful points the opinions of the highest English and Continental authorities are quoted.

We cannot admit that the author has quite sustained the position which he achieved in the production of his first volume; but, taking the work on Veterinary Medicine and Surgery as a whole, it will occupy a high position in veterinary literature.

## OUR LIBRARY TABLE.

*On the Right Use of Disinfectants.* By H. LETHEBY, M.B., M.A., &c. London: Statham and Co. 1874.—This is a reprint of the paper read by Dr. Letheby to the Society of Medical Officers of Health in October, 1873. It is a clear and tolerably complete account of the disinfectants in most common use and their mode of action; but it contains nothing that is new and nothing of any importance with which the readers of THE LANCET are not familiar. Our Reports on Disinfectants, published several months before the date of Dr. Letheby's paper, contain all the essence of the subject, and several important particulars which Dr. Letheby has omitted. The very valuable experience gained during the cattle plague may be cited as an instance. On the other hand, we must again demur to the positive statement of Dr. Letheby, that "the purification of water is ensured by a few drops of permanganate of potash solution (Condy's fluid) or of chlorozone, leaving them to act for a few hours, and taking care that the pink colour is distinctly maintained to the very end of the process." Bad water is improved by such a process no doubt, but to say that its purification is ensured is to go far beyond known facts.

*Insects Abroad.* By the Rev. J. G. WOOD, M.A., F.L.S. London: Longmans. 1874.—Mr. Wood has done so much to popularise the study of natural history, and has moreover done it so well, that the appearance of this new work is certain to be welcomed as an addition to the domestic library, especially where the author's former book, on "Insects at Home," has found a place. The two books together constitute, in fact, an extremely useful handbook to entomology, written in a form adapted to popular use. Of the illustrations we are able to speak in high praise. Some 860 insects are described in the letter-press, and of these no less than 600 are figured, either in the plates or in the wood engravings. The absence of colour no doubt robs many of the insects of their most striking characteristics, but what Mr. Wood says of the difficulty of defining the ground colour of the Tiger Beetles is so generally applicable that it was wise to be content with depicting the *form*, leaving the colour to be gathered from the description. In the preface mention is made of the pains taken by the engraver to ensure accuracy in his part of the work, and the result shows that the pains were well bestowed. Every figure stands out clear and sharp in all its parts, and is consequently, what illustrations frequently are not, a help to the better understanding of the text. We notice, however, one little slip, in the omission on Plate III. (*front*) of two beetles (*Entimus splendidus* and *Cyphus Linnæi*) which in the text are referred to as being figured there. And, by the way, we do not find the latter of these two in the index, though it is fully described at p. 215. This, however, is but a small matter in a book of nearly 800 pages.

*How to Restore the Walking Powers and Muscular Movements generally.* By F. GRAHAM BENNETT. Whitaker and Co. 1874.—Mr. Bennett's little pamphlet contains accounts and drawings of a variety of ingenious instruments he has invented for the relief of sprains, contractions, paralyses, and deformities of the body generally, however produced; and there can be no doubt that in many cases of stiffness of joints and muscles left after attacks of rheumatism, accidents, &c., considerable improvement may be effected by the judicious employment of passive movement and by well-applied support. There is a little of the air of a nostrum advertisement about the book, which Mr. Bennett might usefully correct in another edition; for instance, it would be well if the nature of the "certain composition, unirritating, soothing, and pleasant," which Mr. Bennett spreads over his chamois leather, were explained. The cases given are not very satisfactory. Let us give one, and our readers can judge for themselves:—"*Paralysis of the Lower Limbs from Irritation of the Spinal Cord.*—Miss C., the sister of a medical man, who, I believe, had had the advantage of every opinion, was unable to walk for twenty-eight years, and during all that time had to be carried up and down stairs. I treated this case with bandages, changing them about twice a week, and with the help of a walking machine I quite restored her. She can now walk without a crutch or stick, much to the astonishment of her relations and neighbours." Is a case thus recorded of the smallest service, except to pad a pamphlet?

*The Common Frog.* By ST. GEORGE MIVART, F.R.S., Lecturer on Comparative Anatomy at St. Mary's Hospital. *Nature* Series. London: Macmillan and Co. 1874.—Mr. Mivart's little book on the Frog will be welcome to every student of physiology. It constitutes one of a series that the Messrs. Macmillan are republishing from the pages of *Nature*, in which it originally appeared. Less extensive in design and less exhaustive, as well as more popular in treatment, than the corresponding work in German of Professor Ecker, "Die Anatomie des Frosches," it is much more satisfactory than this because it is complete, whereas Ecker's treatise, of which the first part (like so many German works never destined to be followed by a second), published in 1864, only embraces the skeleton and muscles. Mr. Mivart gives a very intelligible account of the anatomy of the frog, contrasting many of its features with the corresponding parts of higher animals. It contains numerous illustrations, which are particularly good. It should be in every physiological laboratory in the kingdom, and we only wish that that alone would obtain a large sale for it.

*The Rifle and Hound in Ceylon.* By Sir SAMUEL W. BAKER, M.A., F.R.S. London: Longmans.—Sir Samuel Baker is well known to be a mighty hunter and traveller. He was for many years resident in Ceylon, and in the present volume gives his experience of the wild sport to be found in that country. The varieties of game shot by the author included elephants, elks, boars, buffaloes, crocodiles, &c. Adventures of a startling kind and hairbreadth escapes are recorded in a spirited and pleasant manner. Those who seek the Cingalese jungle in search of excitement will find ample directions as to weapons requisite for the sport. The book cannot fail to be a popular one.

## ARMY MEDICAL REPORTS.*

[SECOND NOTICE.]

WE have said that it is mainly from that portion of these volumes devoted to the diffusion of medical, surgical, and sanitary knowledge, and consisting of contributions from the medical officers, that the character of the medical service, as a scientific body, must receive its stamp. The present volume contains two contributions "On the Nature, Varieties, and Causes of Destructive Lung Disease (Pulmonary Consumption) in the Army"; the first by Surgeon Welch, Assistant Professor of Pathology at Netley; the other by Surgeon Alcock. The subject is one of great interest and importance from a national health as well as a pathological point of view; and as these essays (especially the first) are worked out with great care and minuteness, and represent good scientific work and the results of a thorough sifting of modern views, we shall confine ourselves to this subject of *pulmonary consumption in the army.*

To begin with the Alexander prize essay by Mr. Welch,

* Army Medical Department Reports for 1872. Vol. XIV. Harrison and Sons, London, 1874.

which includes 123 closely printed pages, exclusive of illustrations. It commences with a preface, consisting of a brief dissertation on consumption in general as bearing upon that observed in army life, and a short *résumé* of the conclusions arrived at in the inquiry—the subject-matter of the thesis. The disease process—consumption—is here depicted as made up of two distinct periods—"(1) of pathological building up, commencing with the earliest departure from the healthy lung constituents, and terminating with the production of a morbid mass, inflammatory material, or circumscribed growths; (2) of retrogression, in which these morbid products either become abortive from absorption or semi-absorption, leaving a cicatrix or a calcareous concretion, or form a caseous mass, or undergo disintegration with an excavation occupying the site." This second phase is the one usually met with in the hospital wards, and upon the commingled products of the long-continued processes of diseased action observed post mortem the unity in nature of consumption is based; but the necessity of elucidating the first stage, and the agencies in operation, is strongly insisted on, in order to arrive at the true nature of the disease and place preventive measures on a rational basis. The lung destruction in the army is regarded as made up of several distinct varieties, and the classification and detailing of these comprise the first portion of the essay; while the second portion is an inquiry into the causes operating in their production.

Considering the dual opinion in the medical world at large upon the nature of consumption, "well-authenticated cases of army disease were collected" and "arranged into varieties and groups as differentiating features became sufficiently marked and constant to warrant the separation." The basis adopted was that of "morbid anatomy supplemented by clinical data," the conclusion arrived at being, that the varieties of lung destruction were numerous, the causes in operation numerous and divergent in character, and that it was impossible to range them under one sole group or category of diseased action. An attempt is then made to ascertain how far a tangible constitutional diathesis, or inherited internal tendency of the body textures towards special abnormal divergencies, was linked with the lung-destruction cases, the conclusion arrived at being, that "the cause of the disease in the service must be elicited from other conditions than inherent defects in the recruit enlisted, or a constitutional diathesis subsequently unfolded." Not, however, that the existence of an inherited diathesis and its potency as a disease-generator are denied, whether in the form of a "vulnerable constitution—textural delicacy from any cause—ready to become the fostering-bed of any noxious irritant, and probably capable of transmission to offspring, or a congenital histological peculiarity, excess of adenoid tissue, scrofulous diathesis, liable to pass beyond healthy action on slight agencies;" but it is asserted that the army cases do not usually conform to such a rule. It must be remembered also that the statistics show clearly an excess of consumption in the army over civil life at corresponding ages, and hence some special factor becomes necessary to explain this predominance in a carefully-selected and picked segment of the community. The result of the segregation of the individual cases on the basis adopted forms three groups of diseased action in army consumption: "(1) As a primarily essential local lesion, inflammatory in nature; (2) as a local expression of a general agency, an enthetic virus—syphilis,—a constitutional diathesis or source of adenoid infection; (3) as an occasional sequel of other diseased states, derived from them and variable in nature." The groups are based "on the nature of the diseased product and the evolution of the lesion, the varieties in the early history and the clinical and pathological phenomena accompanying the progress of the case." Thus, in the first large group we get varieties of lung-destruction with disease products within the area of the respiratory membrane-vesicles or tubes, and traced through an inflammatory process. This process is regarded as originating from without, and due to vitiated air, chest-constriction, climatic variations, &c., these producing 73·81 per cent. of the total disease, and embracing the excess in army life over the civil element, the varieties of diseased action induced by these agencies being classified as lobar pneumonic phthisis, lobular pneumonic, hæmorrhagic, acute and chronic catarrhal. In 44 per cent. of these cases all diseased action obtained post mortem was limited to the pulmonary viscera. In 68·5 per cent. the form of the morbid material was that known as "the inflammatory or yellow tubercle," and in 31·5 per cent. miliary tubercle was superadded to this and regarded in the light of a complication. The features leading to the deduction of this group as inflammatory and local, and dependent on causes external to the body (consequently to be guarded against, and made the subject of preventive measures), being—absence of hereditary diathesis, special type of body or strumous constitution, clinical data of a preceding inflammatory attack, post-mortem data, microscopic evidence of products corresponding in site and materials to the elements acknowledged pneumonic, presence of localised extinct similar action in bodies of soldiers dying of other diseases or accidentally killed, and the statistics of the dispersion of the group throughout the service; these latter showing the lesion to be generally distributed and constant, weighing on the men as a body, and common to the whole, not connected with personal peculiarities or details, but the factors making an impress upon the sentient individual items of the mass in proportion to the duration of exposure to the noxious agency—the proportion among the one year's service men being ·089, as compared with 8·7 between fifteen and twenty years' service, a gradual progress with the period of exposure to the surrounding conditions of army life. As tending to corroborate the inflammatory nature of this group, there are a series of tables showing a correlation between the amount of inflammatory affections of the chest classed as such—bronchitis and pneumonia—and the consumption prevalence; these are further strengthened by data derived from the community at large, and the deduction is made that it is impossible to disconnect the inflammatory lesions, tubal and vesicular, from the ulcerative process known as phthisis, and that the conditions under which the soldier is placed generate an excess of inflammatory chest affections over the civil population, equally as an excess of acknowledged phthisis. Such inflammatory chest affections are regarded as intimately connected with the respiratory impurities of the barrack-room; these, constantly inspired, either directly inducing localised pneumonias of low type, or predisposing to the general external causes of pneumonia and bronchitis, or, on the other hand, by their devitalising influence on the delicate lung capillaries, predisposing to blood extravasation under chest constriction and exertion, and so inducing the hæmorrhagic form of consumption.

The second group of army consumption—the antithesis of the first group—is termed "specific textural," in which pathological growths precede all other changes in the lung and determine them; it embraces syphilitic gummatous phthisis, and true tubercular. Syphilis is held responsible for 16·21 per cent. of the total lung destruction. Tubercular phthisis is represented by a percentage of 5·63, all the illustrating examples being preceded by chronic lesions in the body elsewhere than the lungs, and the miliary tubercle being regarded as derived from this focus by infection.

The third group is also associated with precursory disease in the frame, and expressed by a percentage of 5·14, the varieties being classed as dysenteric, pyæmic and embolic, diabetic, and local, the latter dependent on direct causes of irritation: these forms are traced through an inflammatory process, miliary tubercle production, embolic transference or thrombus; and the lung destruction is regarded as the sequel of the disease upon which it was engrafted, and without which it would not have ensued.

It will thus be seen that the army consumption acknowledges a wide range of causation, and, in pathology, exem-

plifies both theories in vogue upon the nature of phthisis, the inflammatory and tubercular, to which is added the three syphilitic forms, and those alien varieties of Group 3. In the summary we find the causations are classified in order of potency, but let it suffice that seven-tenths of the total disease are considered as within the range of sanitary measures, and consequently capable of eradication.

In a chapter upon the nature of the lesions, local and general, of the large and important inflammatory group of phthisis, we have the subject of the miliary nodule (regarded as morbidly hypertrophied gland-tissue) and the inflammatory products entered upon, and the relation of the former to the latter in causation and site, also the condition of the other organs of the body in sequence to the pulmonary disorganisation; and, at the end of the first part, the varieties of the army disease are tabularly arranged. In Part II. the statistics of the disease are brought forward. A chapter is given on the *rationale* of operation of respiratory impurities, and another on the presence of consumption among animals, in corroboration of the deductions previously arrived at. Upon these, however, the space at our disposal will not allow us to enter.

Surgeon Alcock, the writer of the second essay, led by the results of Dr. Burdon-Sanderson's experiments on artificial inoculation, embraces to the full the septic origin of consumption, and classifies the varieties of the disease into a threefold group, composed of those in which the poison has been presumably received from without, as in the acute miliary tubercle; of those in which it is originated locally, as in unabsorbed pneumonic exudations which degenerate into infecting material; and of those in which the infectant is developed constitutionally. Of each variety corroborative examples are given, and of the last the writer proceeds to treat at length, as that which relates especially to soldiers. By following out the history of the 35th Regiment for eight consecutive years, the first four of which were spent in India, and the succeeding four in England, he shows that, whereas during the former period the average invaliding and deaths from phthisis were at the rate of 6·6 per 1000 of strength, and as nearly as possible in keeping with the returns of all other regiments in Bengal, yet during the second the average loss by invaliding and death from this disease, *among the men who had returned from India*, reached the enormous proportion of 24·2 per 1000, being more than three times greater than the estimated rate of loss for each of the regiments on home service. And it is contended that similar results would be found in every corps were the career of each man who had been on Indian service separately followed out, and not, as now, lost sight of amidst figures which include an influx of healthy young recruits. To prolonged heat and malarious poison the evil consequences are ascribed, and, resembling as they do the effects of inoculation in predilection for the spleen, it is inferred that they likewise degrade the adenoid tissue of the lungs, thus paving the way for consumptive degeneracy. With these and many other arguments the writer pleads his case, and, we think, so far establishes it, that the subject deserves further investigation, since, should the "returned Indian men" of other regiments be found to have suffered in the same ratio, economy, independently of humanity, will demand a reconsideration of the question of length of service in India. Mr. Alcock, moreover, brings forward some very interesting and suggestive observations in support of the view that those who have written on the possible recognition of a pretubercular stage in phthisis, as shadowed forth by the existence of a peculiar form of dyspepsia, for example, have omitted all allusion to a not inconstant, possibly even constant, evidence, which is its earliest and most appreciable sign—viz., *an inability* on the part of the person in whom the requirements for the development exist and are about to be set in motion, *to maintain the temperature of the body up to the normal standard*,—the deficiency amounting to about one degree Fahrenheit in the morning, and to ·5 of a degree in the evening reading. The way in which he explains the connexion of this diminished heat-producing power of the system with the deteriorating process through which the constitution passes to fit its elements for the formation of tubercle, and the extreme susceptibility of those threatened with phthisis to the evil effects of chills, is very ingenious, and his observations are well worthy of being prosecuted by others.

# REPORT
OF
# The Lancet Sanitary Commission
ON THE
# CONDITION OF WINCHESTER.

THE catastrophe at Over Darwen, and the disgraceful revelations made with respect to the sanitary condition of that town, have broken the silence so strangely kept by the public press on the important question of sanitary reform. The powerful articles which have recently appeared in *The Times*, *Pall Mall Gazette*, and other papers, have not been without effect. From all quarters we hear of renewed agitation, on the part of that minority who have long recognised existing evils but have been powerless to act, which foretells that days of troublous activity are likely to be the lot of many a local board that hitherto has been content with simply "keeping matters under consideration."

The town of Winchester has been one of the first victims of this agitation, and has acquired an unenviable notoriety from the publication in *The Times* of a letter by a resident, depicting in glowing and somewhat sensational terms the insanitary condition of the city. As the prosperity of Winchester depends almost entirely on the number of visitors attracted to it by the beauty and antiquity of its buildings, the celebrity of its public school, and its importance as a military station, the charge of unhealthiness would materially affect its interests, and naturally the inhabitants have been anxious to contradict a statement so injurious to them. In doing this they have, without doubt, considerably understated the real evils that exist. The object of our Report, therefore, is to give the public an impartial account of the present state of affairs.

Winchester, for convenience of description, may be divided into an upper and lower town. The former occupies the slope of a gradually ascending hill, and commences at the Market Cross, in High-street, and extends upwards to the summit of the down. The barracks, the new hospital, the gaol, the workhouse, the principal hotels, the residences of the wealthier inhabitants, and many boarding-houses in connexion with the College, are in this quarter. The lower and most ancient part of the town is built on the level ground intervening between the base of the hill and the river. Here we find the Cathedral, the Close, and the College, and also, separated from these by the lower part of the High-street, is the poorer district. The houses in this district are generally extremely old, usually overcrowded, badly supplied with water, except what oozes up into their cellars from the damp subsoil, and this they certainly have in abundance; frequently the cellar is also a cesspool. Towards the summit of the down the houses rest directly on the chalk—at the base there is a thin layer of gravel; whilst the lower town stands on a bed of peat and gravel about sixteen feet deep. With the exception of a brick drain, which carries off a portion of the sewage from the barracks, the town is without a sewer! Cesspools receive by far the largest quantity of the sewage, and are used in all the public buildings and in the majority of the better houses in the upper town. These cesspools are often of enormous capacity and of extreme antiquity. We noticed that no provision was made for ventilating these receptacles, and consequently the gases emanating from the decomposing excreta have easy access to the houses by means of the closet pipes. The dry-earth system is as yet confined to the college houses and to a female convict establishment. The Lower Brook, which circulates through the lower part

of the town, receives directly the drainage of the houses immediately adjacent to it. At the time of our visit there was plenty of water, but during the dry season it often becomes very low, and the sewage is not carried off, but is deposited. We noticed several banks of this deposit in tracing its course. It is calculated that nearly one-third of the whole sewage of the town finds its way to the river Itchen by means of this brook. The water-supply is abundant, and that distributed by the Water Company excellent in quality, and extremely free from any recent organic impurity. There is a chance, however, of its being contaminated at some future time by sewage percolating from the town goal. The total hardness represented 15 degrees of Clark's scale, and the permanent hardness 4·2. It is obtained from a well sunk at least thirty feet below the level of the river bed. The water obtained from the town wells is doubtless bad, and contaminated with sewage matter, as a very cursory examination is sufficient to show. In some parts of the town water taken directly from the brooks is used; till quite recently the almshouses of St. Cross were supplied in this way. Open conduits at the sides of the streets collect the storm water, which is carried to the river by means of pipe-drains; these conduits receive, however, something more than mere surface water, for we found the gully-holes blocked with masses of miscellaneous and putrescent filth. There are three cemeteries, none of which are drained! Two of these are closed, and are within the precincts of the town; the third, which is open, is just at the outskirt. Except at the very highest points of the town, we were struck by the dampness everywhere apparent; although there had been no rain for twenty-four hours, the roads were more than ankle deep in mud, and on the brick-walls of even the principal streets we noticed a dark-green moss growing with peculiar luxuriance. This dampness, so little to be expected from the nature of the soil, is attributable to the amount of water retained in the subsoil, owing to an insufficient surface drainage, to the number of mill-heads that hold back the water in the river, and to the leakage from defective cesspools. The death-rate for the last ten years averages 21·6 per 1000; in 1870 the death-rate rose to 25·6 (this was the year of the scarlet fever epidemic); and last year it was 19·1. Such a death-rate is preposterous in a town like Winchester, where there are no injurious trade influences at work; where, owing to the numerous charities and foundations for the poor, very little actual poverty exists, and which has such a population of well-to-do, comfortable, easy-going people. We endeavoured to find if the death-rate were caused by an excessive mortality in any one district or parish, but, owing to the returns of the registrar not being tabulated, we were unable to arrive at any definite conclusion on this point. The infant mortality was, however, much too high. We heard of a good many cases of typhoid fever occurring in different parts of the town, but not localised.

Whilst we can only characterise the present sanitary condition of the town as disgraceful, we do not consider any blame can fairly be placed on the shoulders of the present sanitary authority. They have inherited a bad system from their predecessors, which, though it might have acted fairly well when the population was less crowded, is utterly inadequate for present necessities. They have consequently to expend a large sum of money in order to remedy the neglect of others, and to supply the town with an efficient system of sewage removal. We cannot therefore wonder if they hesitate before committing themselves to any one scheme without a thorough investigation of its merits, when the future welfare of the town depends on a right selection. The blame, if any, rests with the inhabitants, who for a long series of years have appointed men to the Council who have wilfully shut their eyes to the growing necessities of the town, and have refrained from sanitary reform with a view of saving the rates. Winchester will now have to pay double for the false economy of the past. For some time various schemes for the drainage of the town have been under discussion, but nearly all have been abandoned as impracticable. As Winchester has never drained into the river, it cannot make an outfall in that direction now, owing to the objections of the Southampton people. In consequence of the marshy nature of the land lying between the downs and the river, no suitable ground can be obtained for irrigation, unless the sewage were pumped to the top of the downs—a proceeding so costly that if adopted it would speedily involve the sanitary authority in bankruptcy. Some of the many "precipitation" methods have been suggested, but hitherto they have not proved to be a success in the towns which have adopted them, and cannot be recommended. The scheme that has found most favour at present with the authorities is that of Captain Liernur. This scheme is practically unknown in England, but in Holland it has been tried, at Amsterdam and Leyden, for about three years, and is said to have proved a success; at all events other Dutch towns are now adopting it, and we are told it is to be employed at St. Petersburg. The principle is described in another place in our columns. We will only state here that the scheme is well deserving of the attention of all sanitary authorities who are considering how they may best dispose of their sewage.

Before this or any other scheme, however, can be carried out, considerable time must elapse, and something ought to be done to mitigate the present evil. The points that seem to us most worthy the attention of the sanitary authority are—1. The laying down of an efficient system of pipe-drains to carry off the refuse and the storm water. This would in no way interfere with any scheme for the disposal of sewage they might decide upon hereafter. 2. The lowering of the water in the subsoil. The improved surface drainage would partially effect this, but to do so effectually the mill-heads ought to be removed. The mortality would be speedily reduced if the surface and subsoil drainage were properly carried out: Salisbury is a case in point. 3. The adoption of the earth system in the gaol, workhouse, reformatories, and hospital. We would lay it down as a principle that the sewage of such places ought always to be kept distinct from that of the town. It is through such channels that zymotic diseases are usually first introduced into a town, and on that account these buildings should be kept as isolated as possible. 4. The cesspools ought to be ventilated. And the inhabitants would do well to prevent the sewer-gas from entering their houses through the closets by ventilating the latter by means of a pipe placed below the trap. 5. The prohibition of any further drainage into the Lower Brook. 6. The extension of the town water-supply, and the closing of all wells in the neighbourhood of cesspools.

The statements that have appeared respecting the insanitary condition of the town have naturally created considerable anxiety among the parents of boys who are at present at Winchester College. We are glad to state that there is no cause for any anxiety. The health of the boys is, and has been for years, admirable. This is no doubt owing to the liberality and forethought of the present headmaster, Dr. Ridding, to whom many of the recent improvements in the buildings are due. The fact that during the last ten years there have been only three deaths from epidemic disease among an average number of 330 boys speaks volumes for the sanitary arrangements. Last year scarlet fever was introduced into the College, but its extension was effectually checked by prompt isolation. In the schoolhouses connected with the College the system of earth-closets has been introduced, and appears to work well. The only doubt we had was as to the absolute purity of the water-supply in the College itself. The water comes from two sources: the chief is obtained from the Company, which, as stated above, is extremely good, and not likely to be contaminated at present; the other is a private supply brought by the College from a spring on the other side of the river. This spring, in our opinion, is extremely likely to receive accidental contamination, and the use of water from that source ought for safety to be discontinued. Lastly, we would advise the College authorities to keep apart from any scheme of town drainage, however complete it may seem; perfect isolation from your neighbour's infected excreta can only be secured in this way. The earth-closet system should be extended from the schoolhouses to the College itself; the use of privies, discharging into the brook, which now serves as an open drain to the College premises, should be abolished. It would be a good thing if the brook itself could be diverted and its course filled up; if such a work be attempted, it must be carried out during the long vacation, and be completed some considerable time before the return of the boys.

# THE LANCET.

LONDON: SATURDAY, NOVEMBER 28, 1874.


THE election of Dr. HARDWICKE to the office of Coroner for Central Middlesex, thirty years after the election of Mr. WAKLEY, and twelve years after that of Dr. LANKESTER, is an event of the most satisfactory kind. Notwithstanding the rejection of some votes, the majority by which Dr. HARDWICKE was elected was no less than 255. He polled 1105 votes against 850 polled by Mr. JAMES BOULTON. There can be no doubt that, if the organisation employed by Dr. HARDWICKE had been as perfect as was that of Mr. BOULTON, this majority could easily have been increased by two or three hundred. As it is, it is ample enough to be significant, and, let us hope, to deter in future legal gentlemen from contesting for the coronership. When Dr. LANKESTER was elected, 2215 votes were polled: 1131 by himself, and 1084 by his opponent; making the majority for him only 47. Dr. HARDWICKE's majority exceeds this by upwards of 200. Before Dr. HARDWICKE, the public is entitled to be congratulated on this result. In our opinion the election of a legal coroner for the Central Division of Middlesex would have been a public misfortune. Life would have been rendered less secure than it is, and the respect for life would have been in some material degree lessened. It does not admit of doubt that the importance of life in the abstract has been steadily kept in the view of the public by medical coroners in a way quite peculiar. The particular life might be one in common estimation of little moment—the life of an infant, or of a pauper, or of an aged man; death may have been brought about by neglect or carelessness rather than by criminal intention. Nevertheless, the keen medical eye has seen that life has been needlessly sacrificed, and has guided the jury to such a perception of the evidence before it as to enable it to bring home blame or guilt to persons who would otherwise have escaped, and by their escape have confirmed others in neglect or in carelessness. By the result of the election Dr. HARDWICKE may feel encouraged to use his own discretion freely as to the holding of inquests. The public has shown that it has little sympathy with the niggardliness of the Middlesex magistrates, who were always harassing Dr. LANKESTER, as indeed they harassed Mr. WAKLEY before him, about unnecessary inquests, and still more about unnecessary post-mortem examinations. The few additional pounds in the year needed for procuring such evidence as will satisfy a medical coroner of the cause of death are not to be regarded for a moment when considered in connexion with the clearer light that is brought to bear on unusual deaths. In our opinion there is still ample room for a medical coroner to collect evidence of the ways in which such deaths are brought about, and by so doing to enlighten public opinion in a most beneficial manner.

While maintaining that the success of this election is due to a settled preference in the public mind for a medical coroner as the fittest man to preside over an inquiry into the cause of death in cases of difficulty or obscurity, and believing that the provinces in this matter will increasingly follow the metropolis, it would be unjust to Dr. HARDWICKE not to allow that the size of the majority, if we may so speak, was in no small measure due to him and to the popularity with juries which he has acquired by his urbanity and his reasonableness. He has no easy task now to perform in maintaining the efficiency and the reputation of a coronership that has been successively held by Mr. WAKLEY and Dr. LANKESTER. It is one which will require all the thought and judgment which he can command. But he comes to the duties with a considerable preparation; he has great precedents to follow; and the manner of his election may give him all assurance that the public still believes in the institution of the coroner's inquest, and wishes his investigation to be real and thorough. To the medical profession the success of the medical candidate is most gratifying. It is only one of many indications that in the future medical knowledge is likely to count for a little more than in the past; and we believe Dr. HARDWICKE may reckon upon the support of the profession in any reasonable course he may pursue for developing the usefulness of his office. To Dr. DIPLOCK a word of praise is perhaps due for retiring in time to save the credit of the profession for being able to act in an emergency with singleness. He did the next best thing to not coming forward—he withdrew in favour of Dr. HARDWICKE.

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IN spite of the attention which has been bestowed on the pathological anatomy of progressive muscular atrophy and on the various relationships of the disease, authorities are by no means agreed as to its precise pathology. The affection was regarded, like many others, as essentially one of the muscular system, until an improved method of spinal cord investigation was introduced. The important additions to our means of examining the nerve centres have revealed extensive disease in cords which, examined by the methods previously employed, would have been pronounced healthy. In most cases of progressive muscular atrophy the cord has been found to be diseased, and the theory has been advanced and widely accepted that the changes in the cord are the cause of the symptoms. But in a few cases the cord has been found free from disease, even when examined in the most careful manner; and some of the best authorities on the subject are therefore inclined to regard the central affection as secondary or coincident. Such is the view maintained by FRIEDREICH in his elaborate work on Progressive Muscular Atrophy, published a year ago, and which must be regarded as the latest and best authority on the subject. But in the well-known German *Jahresbericht* of VIRCHOW and HIRSCH, a chapter is given to the malady in the section on Diseases of the Nervous System, and another in that on Chronic Constitutional Affections, so doubtful is it still considered in which category the disease should be placed.

There seems no question about the extent and degree in which the spinal cord is damaged in many cases, and the particular lesion to which the wasting is related appears to be degeneration of the anterior horns of grey matter. This

fact comes out perhaps more clearly in relation to another set of cases—those of local muscular wasting. In progressive muscular atrophy, cords have only been examined in the later stages of the affection, and the damage extends commonly through the greater part of the centre, affecting regions which are known to be related to other symptoms than muscular atrophy. In some of the cases of local wasting, on the other hand, the disease in the cord is limited with all the precision of a physiological experiment. Several such cases are on record, but none is more instructive than that described by MM. PRÉVOST and DAVID in the last number of the *Archives de Physiologie*. The muscles of one thenar eminence were those wasted, and the change in the cord was opposite to the seventh and eighth pairs of nerves, and consisted of degeneration and atrophy of the anterior horns, destruction especially of the outer group of nerve-cells. The question remains, however—Are these lesions in the cord the cause or the consequence of the muscular wasting? BAMBERGER and FRIEDREICH maintain, on the strength of cases in which the cord presented no pathological appearance, that the changes in it cannot be the cause of the affection. The former believes that the frequency with which the sympathetic ganglia are reported as presenting morbid appearances affords ground for believing that in them we must look for the primary cause of the malady. The anterior grey cornua of the spinal cord may be in the path of the sympathetic filaments, so that disease there will lead to the wasting in the muscles, which may equally result from an affection of the sympathetic ganglia themselves. FRIEDREICH also holds that the affection of the cord is either a secondary change propagated to it from the nerves, or else a simultaneous and independent affection. A grave objection, however, to the latter hypothesis is the fact that injury or disease of the anterior horns of grey matter is followed by muscular wasting. The experiment has been performed on animals with that result, and it is repeated for us in every case of "infantile paralysis." Moreover, it has been found by VULPIAN and DICKINSON, on examination of the cords of those who have had a leg amputated some time previously, that secondary degeneration of the grey matter is far slighter than that common in wasting palsy.

The arguments from the etiology of the affection are of little value. It is true that influences acting on the system as a whole are the most frequent causes of progressive muscular atrophy; but that fact supplies no evidence against its central nature, since such conditions are common causes of spinal-cord disease of many kinds. On the other hand, the frequent association of the early stage of the affection, before the muscular atrophy is extensive or advanced, with other nervous symptoms, such as indicate unquestionably the existence of organic change in the spinal cord, is a proof that extensive spinal mischief may exist long before the period at which it would manifest itself as a merely secondary change.

Much weight is placed by FRIEDREICH on the evidence afforded by the microscopical examination of muscles in the early period of the disease. He believes that the commencing changes indicate that the affection is primarily myopathic. The earliest alteration, he says, is to be found in the perimysium internum: the finest tracts of interstitial connective tissue between the separate primitive bundles begin to multiply, the primitive bundles themselves increase in size, show an increase in the muscle-corpuscles, as well as a proliferation of their nuclei, and here and there the transversely striated substance becomes cloudy and granular. The interstitial hyperplasia of the connective tissue leads in its progress to the destruction of the muscular fibres, either by fatty degeneration, by gradual dissolution, or by breaking up longitudinally or transversely. The process is thus essentially one of cirrhosis of the muscles. But the significance of these changes in the muscle, so far as the nature of the disease is concerned, is very questionable. Indeed, if we compare them with those which are produced by a lesion of the nervous system, it is not easy to see in what their especial characteristic consists. ERB has described (*Deutsches Archiv*, 1869) the changes in a muscle of the face which had been paralysed for forty days by mischief in the temporal bone. Thick septa of newly-formed connective tissue were interposed between the primitive muscular fibres. The size of the latter was much reduced, and they contained numerous nuclei. The transverse striation was preserved in the greater part of the atrophied muscular fibres, while in some it was scarcely perceptible. Granular and fatty degeneration was very rare; the condition, just as in the case of progressive muscular atrophy, resembled a cirrhosis rather than a primary fatty degeneration. So far, then, as the condition of the muscles is concerned, the pathological anatomy of the disease accords as well with a central as with a peripheral origin. The myopathic theory must rest exclusively on the occasional freedom of the cord from disease.

Nothing, however, is clearer in the pathology of nerve disease than that general muscular atrophy may result from spinal mischief. This is seen frequently in the cases in which general spinal paralysis is followed by wasting with a rapidity and to a degree which no disuse of muscles will explain, and the result may be indistinguishable from the ultimate condition reached in the most typical example of wasting palsy. That the same end may be reached by more than a single path is, of course, not improbable; but more evidence by competent observers of the freedom of the spinal cord from disease, in marked and characteristic cases, is necessary before we can set aside the many facts and strong evidence which exist to show that the malady is essentially one of the nerve centre.

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Two sportsmen out shooting in the woods at Highgate, on Monday week last, came upon the body of a deceased gentleman hanging by a handkerchief to a little sapling oak. The oak had bent down with the weight, and the dead body was in a sitting position. The body was identified as that of the Rev. GEORGE BANASTRE PIX, rector of Caenby and Saxby, Lincolnshire. At the coroner's inquest, held by Mr. HUMPHREY at the Gipsy, Muswell-hill-road, on Wednesday, after the facts above related were sworn to, Mr. FRANCIS PROCTOR, who represented the friends of the deceased, deposed further that the deceased, who was forty-nine years of age, was of unsound mind, and escaped from his attendant on the evening of the 4th inst. He had been

brought to London a few days before and placed in charge of a medical man, Dr. ROBERTSON. Deceased was quite deranged at times and at other times quite sane, and was supposed to be getting better. At the time he was lost he was staying at the Great Northern Hotel. He slipped away from his attendant while out with him for a walk, and had not been heard of since till found dead in the wood. In reply to a question by the Coroner, it was elicited that the attendant was not present at the inquiry. Dr. ROBERTSON gave evidence that the deceased was of unsound mind; he had advised that a keeper should always be with him.

So far for the general facts of this singular case. The medical skilled evidence is still more singular. We give it *totidem verbis* as it is reported in the *Hampstead and Highgate Express* of Saturday last, the 20th inst., and as a medico-legal curiosity worthy of record for future reference, for which it is certain to prove useful.

"Mr. Francis Hyde Forshall, the divisional surgeon to the Highgate police, deposed that he was called to the deceased. He had then been dead about a week, and was in a state of partial decomposition. From the examination he had made of the body, he could not say what he died from.

"The Coroner: From the appearance of it outwardly, and the circumstances, can you say he died from strangulation? I cannot say.—I am afraid you don't understand me. From what has been said in evidence, do you believe he died from strangulation?—have you any doubt upon it? I cannot form an opinion.

"Mr. Proctor asked whether, in the opinion of the witness, the deceased might have wandered about until exhausted, and then sat down and tied himself to the tree for support, and thus died; but the coroner said that was more than anyone could answer.

"Coroner (to Mr. Forshall): Looking at the facts as deposed to, do you believe he died from strangulation? I can give you no other answer.—I am asking you what is your belief. You have heard the evidence. Witness: I have no belief. The evidence points to the death being from strangulation; but does not necessarily make a belief.—Coroner: You must have an opinion one way or the other. Witness: I say I have no belief or opinion as to the cause of death.—Coroner: I must again press you to answer my question, whether he died, in your belief, from strangulation. I am not asking you a medical fact. Witness: I say there are not sufficient grounds for forming a medical opinion upon it.—Coroner: Do you wish to add anything else to your evidence. Witness: No.—Coroner: Will you examine the body again?

"Mr. Forshall went and again examined the body; and, on his return, the Coroner said: Does it not lead you to the belief that he died from strangulation? His head was bent forward, and there is the mark of the handkerchief under his neck.—Mr. Forshall: I think it probable that he died from strangulation.

"Dr. Robertson, in answer to the coroner, said he thought it quite possible that deceased tied the handkerchief himself.

"The Coroner, in summing up the evidence, said it was desired to spare the feelings of the friends, and they did not wish for a post mortem examination. It was for the jury to say whether they were satisfied that deceased committed the act which caused his death.

"The jury, after a few minutes' consultation, found that the deceased died from strangulation by his own act while of unsound mind."

There is a story that a coroner's jury holding inquisition over a body found in a sand-pit returned a verdict "Died of sand." There is a moral even in that story. But what a picture does the above report give us of the legal mind presiding over medical evidence in a case of violent death! To extort an answer from Mr. FORSHALL that should prevent a post-mortem and scientific inquiry into the cause of death, he is actually appealed to to speak, *not* on *medical fact*, but on the same ground as might be taken by any of the unskilled witnesses who saw the body. The deceased had the mark of a handkerchief under his neck, and his head was bent forward. Therefore did he not necessarily die of strangulation? Mr. FORSHALL, who knew his duty, very properly declined to affirm any such absurd proposition. He knew from experience that when a dead body is sitting upright the head usually is bent forward. He knew that the mark made by a handkerchief on a body undergoing decomposition is of little value in answering the question of mode of death; and he doubtless had all the argument fresh in his mind whether it be possible for a man to hang himself with the limbs reaching to the ground. He therefore honestly and wisely affirmed only, and that reluctantly, that the deceased probably died of suffocation. It required no skilled witness, however, to make such a statement, and, standing as it does in no sense *ex cathedrâ*, it is, as it was meant to be, purely a negation.

The verdict therefore that this gentleman died of suffocation by his own hand is a mere assumption resting on facts which have no relative business to the question at issue. The question was not whether the gentleman was sane or insane; whether he was likely to commit suicide or was not likely; whether the relatives wished this or wished that. But it was the one grand question for the solution of which Coroners' Courts are held: Of what did the dead man die? That the gentleman whose case is now before us died of suffocation is an assumption for which there is no evidence whatever. It is as unsupported as would be the assumption that the unfortunate man was killed by some other means, was carried to the oak sapling, was tied to it, and left there.

The consequences of such a verdict as has here been recorded are more than deplorable; they are pregnant of danger to the public life. Imagine the would be murderer even of an insane man reading such a verdict, and detecting it possible that a cause of death may be legally registered on mere speculation from external surroundings, while internal evidence that could alone solve the question is left undiscovered. We should think even a Middlesex magistrate might shudder over such a prospect, and wish that his practice of cheeseparing had not reduced the Coroner's Court to quite so complaisant and dangerously collapsed a condition.

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We recently published a letter from Mr. Mahomed, resident medical officer of the London Fever Hospital, in which he pointed out the advantages offered at the institution to patients of the middle class of life while suffering from infectious diseases. This has since been supplemented by a letter in *The Times* from Mr. Hugh Owen, the hon. secretary of the hospital. The charge for accommodation to domestic servants, artisans, &c., is two guineas a week, which covers medical treatment, nursing, food, &c., until the termination of the case.

# Medical Annotations.

"Ne quid nimis."

## THE HAMPSTEAD FEVER HOSPITAL.

THE proposal of the Local Government and Metropolitan Asylums Boards to erect a permanent hospital for infectious diseases at Hampstead, on the site formerly used for a small-pox hospital, and now for an institution for imbeciles, has animated all the inhabitants of that picturesque suburb with one common feeling of indignation and alarm. Nor is this to be wondered at. It was bad enough, people thought, to have had to endure the importation of small-pox into their midst during the last epidemic; but that was a slight evil, for which a temporary iron structure was provided. To be threatened with the continual presence of a large permanent building for accommodating infectious cases of all kinds, drawn from all parts of the metropolis, seems to the inhabitants of Hampstead to betray an almost malevolent intention. The authorities must expect to encounter enormous opposition, for Hampstead, being, as everyone knows, one of the most beautiful and salubrious suburbs of London, has attained a celebrity of its own, and become a favourite resort; and so great is the dread that attaches even to the name of an infectious hospital that the proposition is calculated to inflict a grave injury on the owners of property there. It is easy to realise, then, the state of feeling that the Metropolitan Asylums Board have aroused, and it is hard not to sympathise with the inhabitants. When divested of all exaggerated and chimerical fears, and regarded simply as a matter of expediency, we think that the onus of demonstrating the necessity of this measure will rest with the Metropolitan Asylums Board. Of course, provision must be made somewhere for the accommodation of infectious cases, and the spot selected must be accessible, and not so remote as to endanger the lives of the sufferers in being conveyed there. While we confess that, in our opinion, when proper care and vigilance are exercised, the risk of spreading infection among the community in the neighbourhood of such a hospital is apt to be much exaggerated, the unanimous feeling of the inhabitants in this respect should unquestionably receive full attention. The deterioration of one of the most lovely London suburbs is the reason on which the opposition is mainly to be grounded.

## THE TOPOGRAPHY OF DISEASE.

MR. ALFRED HAVILAND, as medical officer of health for the combined sanitary authorities in the counties of Northampton, Leicester, Rutland, and Bucks, is steadily laying a sure foundation for sound sanitary action in his district. He works upon the sole principle which admits of thoroughness in sanitary labours—namely, the principle of studying in detail the distribution and causes of distribution in his district of the different diseases which are capable of being controlled by these labours. In recent reports presented to his combination of authorities he deals with the distribution of "fever" and of phthisis in his districts. The report on the first subject he has published in a separate form, illustrated with two maps, the one showing the distribution of "fever" in the ten years 1851–60, the second the distribution in the ten years 1861-70. The maps at once convey to the eye the facts which it requires much small type to give in detail. We do not propose to follow Mr. Haviland in his description of the varying distribution of "fever" in the different parts of his district. This description is accompanied by an account of the sanitary conditions of each part as bearing upon the class of disease under consideration. Phthisis, for the present, is treated somewhat more generally, and with especial reference, practically, to the question of overcrowding. It is only by taking stock, so to speak, from time to time, of the diseases prevalent in its district, that a sanitary authority can ascertain, with any precision, what it has to do, or form any certain estimate of what it has done. The method which Mr. Alfred Haviland adopts for this purpose is the one best adapted to succeed and for conveying the facts to those whom they most concern, The importance of these facts being submitted at definite periods to the sanitary authorities for their guidance must be obvious, and it should be equally obvious that they should be preserved, not only for the use of the sanitary authorities, but also for the use of the ratepayers in a readily accessible form. The publication of such facts is the most important agency which a sanitary authority possesses for forming a sound feeling as to health matters among the persons it governs. This, we regret to say, does not appear to be understood by the Northamptonshire combination of sanitary authorities, and they refused to go to the expense of publishing Mr. Haviland's report, of which the report on "fever" forms a part. The report on "fever" is published at Mr. Haviland's own cost. It may be that the authorities conceive that the publication of the report by the local papers will serve every useful purpose. In this we hold them to be in error, for the papers cannot give the illustrated maps, and it is eminently desirable to have the reports in such form that they may serve for a connected history, and can easily be referred to. The two Northampton papers, the *Mercury* and the *Herald*, show an enlightened sense of the importance of the questions discussed by Mr. Haviland by the large space they allot to them.

## THE LIERNUR SYSTEM OF DRAINAGE.

TILL last week, when the letter of the late Mayor of Winchester appeared in *The Times* stating the sanitary authorities had under consideration Captain Liernur's scheme for removing the sewage of the town by his pneumatic system, few besides those interested in sanitary matters were aware of its existence, and even these knew very little definite about it. The principle is briefly this:—Captain Liernur separates the storm and waste water from the refuse water; these are carried off by a separate system of drains. Both, however, are kept separate from the fæcal and urinary excreta, which are removed from the houses by means of atmospheric pressure instead of water. To effect this each closet is connected with an iron pipe, which enters an iron main-tube in the street, which in turn enters a street reservoir, but is shut off from it when not in action by means of a stopcock; each street reservoir is in connexion with a tank, situated under the house containing the air-pump engine, by which a vacuum is constantly maintained. At certain hours men visit the main pipes, open the stopcocks, and at once the excretory matters are sucked out into the reservoir, and thence into the tanks. Here, owing to its small bulk, it can be easily dealt with, either by immediate distribution to the soil as manure, or by conversion into *poudrette* or human guano. Theoretically the scheme is perfect, and its manifest advantages are—(1) By the constant vacuum maintained in the system, no sewer gas can find access to the houses; (2) it does away with the enormous quantity of water required for flushing the sewers; (3) as the sewage is not diluted with a vast amount of water, no expensive arrangements are required to utilise it. The scheme seems particularly suited for those places which have not a natural outfall for their sewage, or have not a sufficient water-supply to flush their drains, or, as in the case of Cambridge, where owing to the dead level little or no fall can be obtained,

and where the sewage has a tendency, in consequence, to deposit in the sewers. The method of carrying off the refuse and surface water is also a chief feature in the scheme. The former is removed by means of impervious vitrified earthenware pipes, so that filtration or percolation is impossible. The surface water is carried off by means of small agricultural drain-pipes laid at a higher level than those which carry off the refuse water; they discharge into them, however, at certain intervals. The advantages claimed by Captain Liernur by this arrangement is that the water in the subsoil is kept at a permanent height above the sewer, and he thinks that so long as the subsoil water outside the sewer is higher than the sewer within, all danger of pollution is avoided. The scheme has been tried for three years at Amsterdam in a portion of the town, and other Dutch towns are adopting it. We are told that Dr. Stronsberg, the contractor, and Count Stuckenberg, have just signed a contract for laying down the Liernur system of sewerage in St. Petersburg, at a cost amounting to nearly £4,000,000. Captain Liernur believes his system will be a financial success, and that there will be a return on the capital employed from the sale of the *poudrette*. Without being so sanguine, we would be more than content with any scheme that would efficiently get rid of our excreta and pay its working expenses. These are the two points in which all the schemes hitherto tried have failed.

## HEALTH OF JERSEY.

OUR allusion to the arrival and spread of small-pox in Jersey and to its general sanitary condition has had an excellent effect. Of course we have come in for some abuse. But we are too experienced in these matters to care much about that. Anybody who ventures to show that the sanitary condition of Jersey is discreditably unworthy of its natural advantages is sure to be told by the apathetic authorities that his statements are ridiculous, and to have hurled at him that well-worn passage attributed to Sir Benjamin Brodie, about the virtues of the climate and the beauties of the place. Our representation of the existence of small-pox in the island—taken, be it remembered, from a Jersey paper—is amply sustained in a communication to *The Times*, evidently authoritative. It is something to have extorted such a report from authorities whose policy in regard to infectious and preventable disease, according to the correspondent of the *British Press and Jersey Times*, is *Hush!* We learn, then, from the authorities of Jersey, that there have been ten deaths in the island from small-pox, originated, it would seem, by a convalescent from the disease recruiting his health in Jersey, with the selfishness that is too common in convalescents. Let it be remembered that each death implies a large number of cases that recover, and it will be allowed that the writer in the Jersey paper did not speak a minute too soon. Our case against the Jersey authorities has two points; first, that having an island perfectly free from the disease up to four months ago, they had the means of perfectly limiting it; secondly, that in accordance with a general disregard of sanitary precautions and legislation by the authorities of Jersey, even small-pox was allowed to have its way, and is now, by the admission of the authorities, established in such various and distant spots of the island as St. Heliers, St. Owen, and St. Peter's. Ten preventable deaths in a small island and a corresponding amount of sickness may appear a light matter to Jersey authorities; but to those who seek a health resort it will appear differently.

As regards the general part of the charge against the sanitary authorities, that they have no sanitary laws, and that, in consequence, the island is discreditably unhealthy, it remains intact, and is ably backed by a leader and by a correspondent in the *Jersey Times and Press*. We did not speak without experience, reason, and facts, including facts supplied courteously to us by no less an authority than the intelligent registrar of the island two years ago. This gentleman gave us to understand that the system by which deaths are registered is of the most lax order, no certificate of death from the doctor being necessary. From the figures then supplied to us by this authority, it appeared that the mortality of Jersey was in the year 1871, 21·42; and that of St. Heliers, which includes about three-fifths of the inhabitants of the island, 26·04. We contrasted this mortality with that of the Isle of Wight and Eastbourne, respectively 17 per 1000, and with that of Worthing and Hastings, respectively 18 per 1000. We found evidence that a large part of the mortality of Jersey was due to bad water-supply and bad drainage, causing typhoid, diarrhœa, and dysentery. Since then the sanitary reformers of Jersey have been labouring to procure a better system for securing that a proper certificate of the cause of death shall form a part of the registration of deaths, but, notwithstanding some attempt at legislation by a few members of the State, nothing has been done. The apologists of the state of matters in Jersey, if we may judge from the letter of "Veritas" in *The Times*, do not pretend that there is any sanitary law in Jersey. It is preposterous to talk of a sanitary committee meeting "when occasion needs," if it has no law at its back. The climatic advantages of the island of Jersey are all that Sir Benjamin Brodie described them to be, but they afford not the slightest protection from typhoid or small-pox, and they only enhance the responsibilities of authorities that allow preventable unhealthiness and infectious disease to kill the people and swell the mortality of the island.

## OUR NAVAL CADETS.

THE Committee appointed by the Lords of the Admiralty to inquire into and report upon the physical condition of, and the course of study pursued by, the naval cadets, have terminated their investigation and furnished their report. We are bound to say that the Committee seem to have gone into the subject in a very thorough way. In order to pursue a comparative method, they adopted the practical expedient of making themselves well acquainted, by personal inspection, with the physical condition of the boys of corresponding ages at Eton, and the arrangements adopted there. Moreover, the Committee obtained returns from the headmasters of various public schools, and visited the Naval School at New Cross and the Greenwich Hospital School. With these abundant means for instituting a comparison, it is satisfactory to learn that the traditional glory of our navy is not likely to diminish from any lack of physical health and vigour in the cadets. They are fully equal in point of physical development, in height and weight, to the boys of like age in the best public schools of this country, and their rate of growth is, if anything, in excess of what would appear to be the normal standard. Out of ninety-five cadets on board the *Britannia*, only three were unable to swim, and a large proportion of them excel in manly sports. So far for the cadets themselves, and now for the conditions by which they are surrounded. The Committee, after several minute inspections of the *Britannia* and *Hindostan*, one of which was at midnight, report the sanitary condition of these vessels to be simply unexceptionable. It will be remembered that Lord Chelmsford, on a late occasion, delivered a very animated speech in the Upper House, in which he animadverted on the character of the entrance examination for the navy, and cited a number of ridiculous and puzzling questions in support of his strictures. The Committee pass an unfavourable judgment on the course of study, declaring that the brains of the cadets are overtaxed

by the excessive number of subjects, and the system of "cramming" and over-examination thereby necessitated. The Committee propose a new scheme for training the cadets; and, as regards the entrance examinations, they are evidently in favour of reverting to the old system of nomination, and a sound pass-examination, as a substitute for what we cannot but regard as the unhealthy and mentally debilitating process of "competition and cram" that now exists.

## THE STATISTICAL SOCIETY OF LONDON.

THIS Society, which for the last twenty-eight years has been located in St. James's-square, has now removed to King's College, and on the 17th inst. held its first meeting there, when the inaugural address of the session 1874–5 was delivered by the President, Dr. W. A. Guy, F.R.S. We are glad to learn that the Society is in a very flourishing condition, numbering now over 600 members. Many new Fellows were elected on this occasion, including the following members of our profession:—Drs. Richard Quain, Francis Sibson, A. E. Mackay, J. T. Arlidge, R. Elliot, James Morris, Charles Kelly, and Sandford Moore. As usual in such discourses, the subjects touched upon were manifold, and the field of inquiry deemed to be within the scope of the Society was shown to be wide enough to satisfy any cravings which the most enthusiastic lover of figures could entertain. No doubt it is rather a sharp strain which the listener feels when, after following the lecturer through a pleasant colloquial sort of preface, embracing a variety of interesting references to men and things, he is suddenly asked to consider "the condition and prospects of society." In such a theme is no meat for babes, at any rate. And Dr. Guy seemed disposed to face the problem in all its vastness, declining, in fact, to set any limits as to time, place, or any other condition. "We do not," he says, "suffer ourselves to be indifferent to anything which affects the well-being of man as the living unit of society." The past, the present, and the future alike are brought into requisition by the statist as occasion may demand.

Perhaps it is hardly necessary for us to follow Dr. Guy critically in respect of this rather bold claim on behalf of the statisticians to put human nature into the arithmetical crucible, inasmuch as the most weighty parts of his address were devoted to illustrations of particular points in the condition of society, which, as they were drawn from his own experience, have a value not to be attached to generalities, however profound. It may be noted, however, in passing, that, subsequently, Dr. Guy, perhaps not unintentionally, qualified his broader reference by observing that the Society was prepared to study and discuss any subject interesting to or concerning man, that could be "illustrated by figures." We should tremble for the future of the Society if it were to open its doors to mere social theorists and men of "ideas" only; all notions ventilated there must be based on statistics that will stand close and severe criticism, or they will be simply blown away as chaff before the wind.

Amongst the special points referred to was the importance of the study of sanitary science, especially in respect of "the standards and tests by which to measure, compare, and judge the health of various sections of the people." Population in its many bearings was shown to be a mine capable of almost indefinite productive working. Health, Dr. Guy remarked, was a topic which branched out into a greater number of distinct inquiries than any other to which the attention of statists was directed; might he not have justly added that of late years it has scarcely received as much attention in the Statistical Society as it was entitled to? We are glad to observe that at the Society's next meeting the subject of health statistics is down for discussion, so perhaps the neglect referred to has at length become apparent to the Council.

In all health inquiries the "figures of arithmetic" do indeed "play an important part"; and, like Dr. Guy, we are satisfied that pre-eminently in such inquiries "the universal methods of logical research find their application and their abundant reward."

Upon the subject of poverty and destitution as conditions of society, Dr. Guy had much to say, insisting strongly upon a distinct line of demarcation between the poor and the destitute, as representing two classes to be very differently dealt with. In other words, there is a poverty which bears within its bosom the germs of amelioration, and there is a poverty which simply demands stern repression as utterly irremediable, hopeless, and bad. This subject it was hardly possible to do justice to at the end of a long address, and we do not, therefore, pursue it upon a basis which Dr. Guy would no doubt admit is imperfect as an exposition of his views. He has further some remarkable facts, derived from his knowledge of convict prisons, relative to the amount of crime committed by imbeciles, and he is led to the conclusion that persons of this "dangerous" class ought not to be allowed anywhere to remain at large. He would, in fact, confine them in the union workhouses, now (as he holds) improperly occupied under a system "based on the unsound theory that it is the duty of the State to take care that no single person shall die of want, instead of that better theory that it is its duty so to manage matters that the smallest number of people may perish."

Dr. Guy has the courage of his convictions, but it will be a tough job to pull down the English Poor-law system, if he seriously contemplates such an enterprise.

## TYPHOID FEVER AT LEWES.

WE have received a copy of the report read last Saturday before the sanitary authority at Lewes. The report is most exhaustive, and is the result of one month's anxious investigation on the part of Dr. Thorne Thorne, the Government inspector. It will be remembered that in our report published three weeks ago it was stated that the whole history of the epidemic pointed to some definite contamination of the town water-supply at its source, somewhere about the middle of July. We stated that no evidence of this contamination had been obtained, but that the officials were investigating most carefully every source by which the contamination could possibly have been conveyed. It appears now, that during July, owing to the excessive dryness of the season and lowness of the springs, water had got pumped into the reservoirs from the Cockshute stream, at a spot known as Beard's Pool. Now the Cockshute stream is tidal, and is in connexion with the river Ouse, which receives the drainage of the town. To prevent the tidal wave passing into Beard's Pool, a valve is placed some little distance down the stream. At the time of our visit we inspected this valve, and found it acting perfectly, so that it was impossible for the up-stream to pass it when closed. Since our visit it has transpired that some children, in *July*, visited this portion of the stream, and, probably for amusement, placed some boulders of chalk in this valve, which of course allowed the stream to pass upwards to Beard's Pool. The coincidence of the outbreak with the visit of these children is remarkable. The primary cause having been ascertained, it is easy, as we showed, to account for the distribution of the poison and for the second outbreak. Dr. Thorne remarks, "that enteric fever once prevalent in the town, its spread was due to specifically fouled air and probably to particles of specifically diseased evacuations being drawn into the water-mains, the latter being facilitated by the so-called intermittent method of supplying the

town." It will be remembered that the outbreak of the disease last year at Caius College, Cambridge, was caused in this manner, as was very conclusively shown by Dr. Buchanan. It furnishes, therefore, an additional argument for the maintenance of a constant water-supply. This Lewes is to have for the future, and the possibility of any fresh contamination of the water-supply at its source is guarded against by the most ample precautions.

## MELANCHOLIA v. HYPOCHONDRIASIS.

THE Proceedings of the Clinical Society, dealing, as they do, with the living rather than the dead, are not unfrequently, as befits them, somewhat lively, and it is not unusual to have the monotony of the evening broken by a friendly tournament. Sir William Gull and Dr. Buzzard, at a late meeting, had an amicable and interesting encounter, in which, we must admit, the ex-president was somewhat worsted by the ex-secretary. The *casus belli* was a point in medical nomenclature, and a successful resistance was made to the propagation of a new dogma. We must refer our readers to the report for the details of the two cases which were the subject of discussion.

We think it is, above all things, desirable that a good example should be set by the heads of the profession against transposing terms which have been established from time immemorial, and sanctioned by the College of Physicians. We are ready to admit that much of our nomenclature is clumsy, unscientific, and worthless, but until we have got something with which we can safely replace the terms that have served safely enough to denote the various classes of our patients, we had better adopt the old custom of letting "well enough" (or bad enough) alone.

There is a general agreement among educated practitioners as to the difference between melancholiacs and hypochondriacs. Perhaps, indeed, there would be less divergence between doctors on this than on many other points. The points of distinction are easily visible, the points of contact are obscure enough. When therefore Sir William Gull asserted that, in his opinion, a patient whose mind was possessed by an all-pervading sense of misery, whose diseased imagination made the natural actions of his body insupportable, and whose food had been administered 8000 times with a stomach-pump, was suffering from hypochondriasis, amazement sat on every face, especially when the audience were told that this poor hypochondriac was still confined in an asylum, and dependent for his sustenance on turtle-soup and olive oil given through the "œsophagus tube."

## THE SOCIETY OF MEDICAL OFFICERS OF HEALTH.

THE monthly meeting of this Society on Saturday last, the 21st, was well attended, and the proceedings were of a lively and animated description. Dr. Dudfield, medical officer of health for Kensington, called attention to the bye-laws for regulating slaughterhouses adopted by the Metropolitan Board of Works, and moved some useful amendments and additions thereto in the form of a resolution, most of which were, after some discussion, adopted. Dr. Buchanan presented to the members of the Society copies of a statistical compilation showing the comparative mortality at various ages in two portions of England, *apropos* to questions raised in the President's opening address of the present session. Dr. Vinen, the Secretary, then read a letter from the Registrar-General withdrawing from the honorary membership of the Society. The style in which the letter was written was neither dignified nor courteous. It appeared that the sins of the President (which sins we have already discussed) are to be visited upon the members of this unhappy Society, and that Major Graham has resigned because Dr. Letheby has attacked his statistics, and also because he assumes that all the other members endorse the views of their Chairman. (We may remark, parenthetically, that the assumption is gratuitous, for we might as well assume that all the members of the Clinical Society endorsed the views of their President in the winter of last year, when Mr. Prescott Hewett delivered a most lucid address on the causes of pyæmia.) The Society, having descended to its normal gravity, proceeded to listen to a carefully compiled and elaborate paper from Dr. Tripe on the statistics of deaths from epidemic diseases in England and the metropolis for thirty years. A consideration of these comparative statistics goes to prove (according to the author of the paper) that the so-called preventable diseases have not diminished in intensity or fatality in spite of all the sanitary improvements that have been effected, and he conceived the term "preventable" as applied to these diseases to be a misnomer. Dr. Buchanan combated this view of the matter most emphatically, and showed by the record of actual facts how very materially these diseases can be arrested and extinguished by a proper system of hospital accommodation. Dr. Septimus Gibbon did not believe in hospitals for epidemic diseases, and asserted that in the small-pox hospitals of the metropolis the mortality was over 20 per cent. As the usual time had been already exceeded, the meeting adjourned, after having voted cordial congratulations to Dr. Hardwicke on his election as Coroner for Central Middlesex, and examined some splendid samples of celery brought by Dr. Carpenter from the Croydon Sewage Farm. It is understood that a discussion on Dr. Letheby's address will take place at the next meeting of the Society.

## SANITARY NOTES.

DR. RICHARD BUDD, of Barnstaple, is a magistrate and alderman of the town, and in the latter capacity expounded very fully to his brethren on the Town Council, some few days ago, the views held by him and by Dr. William Budd, of Bristol, as to the efficacy of good drainage in the prevention of enteric fever. Dr. Budd is reported to have said in committee that "they might do what they liked with the drainage of a place, and make it as perfect as possible, but they could not prevent typhoid fever. If there were a case of typhoid fever, all the seeds proceeding from the patient were sown broadcast throughout the town by being thrown into the sewer, and not destroyed by disinfectants. There was only one way of preventing the spread of fever, and that was a certain one—thoroughly disinfecting the discharges from the intestinal canal, in which, as a rule, all the danger of contagion lay." Dr. Budd further suggested that the medical officer of health be instructed to prepare a set of plain printed directions for preventing the spread of the disease, a copy of which should be placed in every infected house for the guidance of the inmates. The motion was carried unanimously. We trust, however, that Dr. Budd will not cause the inhabitants of Barnstaple to neglect their drainage system and water-supply, and rest contented when they have drenched their houses and streets with (so-called) disinfectants.

The city of Carlisle has been and still is suffering from severe epidemics of typhus and scarlet fever, more than 500 persons having been affected since the beginning of April last. Some three months ago Mr. Power was sent down by the Local Government Board to make an official inquiry into the causes of the outbreak; and he has presented a report, on which, however, no action whatever has as yet been taken. Last week there were about seventy

cases of scarlet fever and typhus in the public hospitals of the city.

A public Conference on sanitary matters is arranged to be held at Birmingham at the beginning of next year. There will be two distinct meetings—one for the consideration of the sanitary state of large towns and of hospitals for infectious diseases, and another for the consideration of the dwellings of workmen and proposed schemes for remedying their defects. It is intended to invite to the Conference representatives from the Sanitary Authorities of Manchester, Liverpool, Leeds, Sheffield, Bristol, and some other large towns.

The epidemic of enteric fever at Over Darwen is abating.

## PATHOLOGICAL EXPLANATION OF LOUISE LATEAU'S CASE.

IN his paper on Purpura recently read before the Medical Society of London (and to which we referred in a previous number), Dr. Richardson gave what may be called the pathological explanation of stigmata, the bleeding points on the surface of the body with which some persons of peculiar physical and mental constitutions are affected. Dr. Richardson spoke from an example of the malady which had been under his own observation, and he showed that the conditions leading to the phenomenon were twofold: a thin or super-aqueous state of the blood, and a diseased state of the vessels of the minute circulation, in points. There is formed, he shows, at these points, a minute subcutaneous swelling which may be called a capillary or arteriole aneurism, with, in time, a minute opening from it on to the surface of the body, from which opening the fluid blood easily escapes under any influence that acts upon the circulation so as to excite the heart to increased motion. The stigmatic point in the case observed and commented upon was on the inner margin of one of the fingers, and by means of the magnesium lamp he was able to define the small vascular tumour with which it was connected, to lay it open by puncture of it with a lancet, and so to effect a cure. Dr. Richardson added that in certain of these cases the influence of the mind upon the heart was quite sufficient to excite such an over-action of the circulation as would cause a temporary exudation of blood from the stigmata. Expectation of the bleeding at a particular time was thus of itself enough to induce the phenomenon.

## HEALTH OF BRIGHTON.

DR. KEBBELL, Medical Officer of Health for Hove, in a recent report laid before the sanitary authority, shows that during the past quarter the health of the district was remarkably good, the annual death-rate for the period amounting to only 13 per 1000. Not a single death from the zymotic class of diseases (excluding diarrhœa) was recorded, a singular immunity when it is considered that the district has a population of between eleven and twelve thousand. During the early part of the quarter there were a few slight cases of scarlet and enteric fevers, but the infection was confined to the houses primarily attacked. There were 243 complaints of nuisances made, the majority of which consisted of defects in house drains, which were either clogged or so faulty as to admit air from the street sewers into the interior of the houses. There is still considerable room for improvement in the important item of water-supply. Dr. Kebbell states that in one house visited there was only one water-cistern, and that placed in a water-closet situated in the centre of the house, and which had no communication with the open air. Several other instances of dangerous conditions of a like nature are mentioned. A system of house-to-house visitation is now regularly carried out in the district by the sanitary inspector. Visitors and residents are reminded that complaints of defective arrangements or nuisances in their houses will receive immediate attention on application to the inspector at the Town Hall.

## THE IRISH HEALTH ACT AND THE DOCTORS.

THE profession in Ireland have just grounds for feeling dissatisfied with certain provisions in the Public Health (Ireland) Act. Notably the important question of remuneration is susceptible of improvement, the payment at present being considered totally inadequate to the time and trouble bestowed by medical officers appointed under the Act. The agitation initiated by the Poor-law medical officers who are chiefly affected by the Act, seconded, as it is, by the important medical corporations, leaves no room to doubt that an early and favourable consideration will be accorded to their just and reasonable demands. On Tuesday last a deputation, consisting of the president and a number of fellows of the King and Queen's College of Physicians, waited upon Sir Michael Hicks Beach, chief secretary for Ireland, for the purpose of laying before him the grievances complained of in regard to the Act. The chief secretary, after defending the appointment of dispensary doctors as sanitary medical officers on the score of economy and policy, expressed himself as bound to admit the validity of the arguments urged by the memorialists. While it was the duty of the Government to see that the work was properly performed, it was also its duty to ensure the proper remuneration of sanitary officers. We have no doubt that the question is now occupying the serious attention of the Local Government Board.

## ANTIQUITIES AT THE OBSTETRICAL SOCIETY.

THE next meeting of the Obstetrical Society, which will be held on Wednesday, December 2nd, promises to be rendered specially attractive by the exhibition of the following curiosities:—A cast of an antique group, found at Cyprus not long since, representing the circumstances of labour, at a period, perhaps, B.C. 300, by Mr. Bibby, of Green-street; an engraved portrait, dated 1658, of Paul Chamberlin, M.D., inventor of the midwifery forceps, presented by Mr. Taylor, of Birmingham; and, by the courtesy of the President of the Medico-Chirurgical Society, Chamberlin's original instruments. At the same time, Mr. Donald Napier will lend for the occasion two rare books from his valuable collection—one an illustrated bible, date 1587, which contains a representation of the lying-in chamber, and the other "Ye Happy Delivery of Women," by Guillemeau, 1612, black letter English.

It is seldom such an interesting collection is seen at a medical Society, and we have no doubt the members will be pleased to have the opportunity of inspecting them.

## AN AMERICAN VIEW OF LEGISLATION FOR CONTAGIOUS DISEASES.

THE opponents of the Contagious Diseases Acts in this country are doing their utmost to efface from the statute book what they declaim as a blot upon humanity and a disgrace to civilisation. On the other hand, the Nestor of American Surgery, Dr. Gross, whose distinguished position not long ago received recognition on the part of the University of Oxford, in the shape of the honorary degree of D.C.L. of that University, has been urging in the most emphatic way possible on his countrymen the necessity of doing something to arrest the progress of a scourge which, in his opinion, is "imperceptibly sapping the very foundations of society." Few men can claim to have had a larger sphere of experience and observation on which to

base their opinions than Dr. Gross. As the subject of his address, delivered before the American Medical Association at its meeting at Detroit this year, Dr. Gross selected "Syphilis in its Relation to the National Health;" and he expressly states that he regards it as invested with such momentous importance that he is willing to incur the reproaches or denunciations of those whose prejudices might be disturbed by what he was about to say. And the whole bearing and tenor of his facts and arguments lead up to this one point, that he regards legislative enactments with the view of limiting the spread of this disease as a matter of paramount importance.

## THE MEDICAL OFFICERSHIP OF HEALTH, ST. JAMES'S, WESTMINSTER.

WE regret to learn that the Vestry of St. James's, acting on the advice of their sanitary committee, have decided to combine the offices of medical officer of health and public analyst in one appointment. We regret this decision for the reason that the obligations of these offices are essentially distinct, and it very seldom occurs that any candidate can be obtained sufficiently acquainted with both to enable him to fill them with efficiency; either he will be a chemist pure and simple, with no practical knowledge of public health questions, or he will be a physician whose knowledge of chemistry has become rusty by failing to keep up with the knowledge of the time. It is not given to everyone to be a Redwood, or Stevenson, or Dupré, and we opine that even the greatest authority on food adulteration—Dr. Hassall—would be somewhat abroad if required to investigate the origin of preventable diseases. Nor is this all; we hold that the analyst of a district should be wholly independent of local influences. What possibility is there of such independence where the two appointments are combined in the same person, and that person is elected and re-elected by the tradesmen of the locality, the purity of whose goods it may be his province to inquire into. If not too late, we trust that the Vestry of St. James's may reconsider their determination.

## THE CHARITY VOTING REFORM ASSOCIATION.

THE managers of this Association are again putting their shoulders to the wheel, and, headed by Sir Charles Trevelyan, endeavouring to gain the support of subscribers to the voting charities, in order to break the neck of that costly and mischievous system of canvassing, the evils of which were so prominently set forth at a meeting held in the City some twelve months ago. We at that time commented on the tenacity with which the British public clings to its pet "institutions," and though at the Mansion House meeting to which we refer the reformers were worsted by numbers cleverly whipped up for the occasion, the large number of individuals who have joined the Charity Reform Association is a sufficient indication that, in the metropolis alone, many influential persons are convinced that the present system is unsound in theory and most pernicious in practice. In thus indicating a most hearty sympathy with the work and its object, it is, however, necessary to remind the reformers that, whilst working to annihilate the existing order of things, they are bound at the same time to provide a remedy, and to put that remedy freely and fairly before the public. The suggestions contained in the advertisement just issued all point to a solution of the question, but do not indicate with sufficient precision what the future action ought to be. And as the Association has to deal with a very large number of subscribers of different creeds, classes, and proclivities, it is most advisable that a definite plan for remedying the evils complained of should be placed before them.

## UNIVERSITY OF LONDON.

AT a meeting of the Senate, held last month, the following notice of motion was made by Dr. Parkes:—"That it is desirable that a degree in State Medicine or Public Health should be instituted, and should be obtainable by any graduate who has passed the second M.B. examination, and that it be referred to the Committee on Examinations in Medicine to consider and report as to the subjects which should constitute the examination, the number of examiners required, and the mode in which the examination should be conducted." At the same meeting it was resolved that Dr. Burdon Sanderson's proposal to deliver his annual course of lectures at Owens College, Manchester, be acceded to.

## THE FREE MEDICAL SCHOLARSHIPS' FUND OF EPSOM COLLEGE.

AT a recent meeting of the Senate of University College, London, Bilton Pollard, a Foundation Scholar of Epsom College, was awarded a Free Medical Scholarship, to which is attached the Carr Exhibition of £50 a year, tenable for four years. The election of Mr. Pollard, who, whilst a pupil of Epsom College, passed his matriculation and preliminary and scientific examinations at the University of London, obtaining first-class in both, completes the number of free medical scholars, four in all, of University College, the others being William Johnstone, Ernest Sutton Smith, and F. W. Slater Culhane, all of whom enjoy, under trustees, scholarships of the value of £50 a year. Dr. Carr is the acting treasurer of the fund.

## THE ARCTIC EXPEDITION.

THE proposed Arctic Expedition, which will, we presume, soon be an accomplished fact, will afford many opportunities of gaining useful knowledge on the important subject of sanitary science afloat. Although the records of most Arctic expeditions include some accounts of scurvy, we may fairly hope that the disease will find no place in the forthcoming exploration. But many valuable notes may be made as to diet, ventilation, clothing, and temperature, that might be turned to practical account by all engaged in looking after the health of seamen, whether in the Royal or the merchant service.

## ST. JOHN'S HOSPITAL FOR SKIN DISEASES.

AT a meeting of the Board of Management of this remarkable hospital, Captain Charles Mercier in the chair, it was resolved that, though the hospital is greatly in need of funds, the Committee feel that, as several of their members are also members of the Hospital Saturday Fund, it is desirable to decline participating in this year's Hospital Saturday collection. This good taste on the part of the Board of Management saves the Committee of Distribution of the Hospital Saturday Fund from having to discharge a very delicate duty.

## BIRMINGHAM SEWAGE DIFFICULTIES.

IN attempting to escape the Scylla of Chancery injunctions and sequestration, the unfortunate Corporation of Birmingham have fallen upon the Charybdis of an increased amount of zymotic disease and an unnaturally high death-rate. A recent application to the Vice-Chancellor has been made to enable the Corporation to construct new sewers, and that application has very wisely been granted.

The total length of the required sewers is 16,810 yards, and before they are completed, the new defecating tanks, part of which are already constructed, will be in full operation. That something is urgently necessary in order to render the town more healthy is conclusive from the recent report

of the medical officer of health, showing that the average death-rate has increased from 23·24 to 27·74 per 1000, and that this increase is mainly attributable to preventable diseases.

We trust that now the Birmingham Corporation are alive to the necessity of sanitary reform, no further legal obstacles will arise to prevent the carrying out of their laudable intentions.

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MEMBERS of the medical committee and other friends, including some of the influential freeholders who were active in the late election, have invited Mr. Coroner Hardwicke to a complimentary dinner, to be held on December the 10th, under the presidency of Dr. Richardson. The movement is intended to be congratulatory to the new coroner, and also to give expression to the satisfaction generally felt on the reaffirmation of the principle that the important office of presiding over inquiries into the cause of death should be entrusted to representatives of the medical body. Messrs. May and Thomas are the honorary secretaries, and Mr. James Beal, of 20, Regent-street, who will act as honorary treasurer, has kindly given the use of his rooms to the executive committee.

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DR. FRASER, medical officer of health for Weaverham, reports that scarlet fever has been epidemic in his district since August last. In all 241 cases have been recorded, of which 39 proved fatal. Weaverham has a population of only 1722, so that the severity of the visitation is apparent and unquestionable. The death-rate from scarlet fever was 16·84 of the population and 17·57 of the persons attacked. The disease appears to have been actively propagated through the medium of school-children. In the quarters where it is disappearing, typhoid is said to have made its appearance. The town is clearly a most eligible sphere for a sanitary reformer.

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THE mortality in London last week amounted to 1795 deaths, including 17 from measles, 124 from scarlet fever, 16 from diarrhœa, 37 from whooping-cough, and 38 from different forms of fever. In consequence of the increase in scarlet fever, the Homerton Small-pox Hospital has been set apart for the reception of scarlet fever patients. The deaths referred to diseases of the respiratory organs and phthisis rose to 672, and exceeded the corrected weekly average by 73.

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MR. P. H. HOLLAND, medical inspector of burial grounds, held an inquiry some few days ago on the state of Walton Cemetery, Liverpool. It appears to have been the practice to cover the coffins of paupers interred in the cemetery with a few inches of earth, and some have been left for many hours without any covering at all. We commend these observations to the advocates and opponents of cremation, and hope that the evidence adduced may tend to make a convert of the inspector.

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THE Manchester and Salford Sanitary Association have memorialised the Corporation of the City of Manchester on the necessity of providing, out of the rates, small hospitals for the reception of cases of infectious disease. This is a measure that has long been urged in the pages of the Manchester newspapers by members of the profession.

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LORD DERBY has been elected Rector of the University of Edinburgh by a majority of 187 votes, over Mr. Lyon Playfair, M.P., the other candidate, the numbers being respectively, 770 and 583. The usual intellectual diversion of throwing peas, flour, and eggs was not omitted by the students during the polling.

THE authorities of Bethlehem Hospital, for refusing leave to the friends of an inmate to see him, have had their conduct brought under the notice of Mr. Chance at the Lambeth Police Office. The complainant did not make out any very strong right to see the patient, especially as he had only been in the hospital a few days. Mr. Chance recommended them to communicate with the wife of the patient.

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DR. SEDGWICK SAUNDERS, medical officer of health for the City, reports that 635 houses had been inspected during the past fortnight, 89 of which were found to require sanitary improvement. The markets and slaughterhouses were visited, and over four tons of meat condemned and destroyed.

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THE Society of Public Analysts have convened a general meeting, to be held at the Cannon-street Hotel on Tuesday, December 1st, on which occasion the definition of adulteration submitted by the committee, and the question of amending and consolidating the Adulteration Acts, will be considered and discussed.

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ON Tuesday ten inquests were held by the metropolitan coroners on the bodies of persons whose deaths were attributed to the effects of the fog. It is stated that the coroners have since received notice of twenty more deaths which are supposed to have been caused by the fog.

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THE last quarterly return of births, deaths, and marriages registered in Scotland, give an unusually high rate of illegitimacy in many of the districts. Of the deaths, fully 30 per cent. were referred to the zymotic diseases, the most fatal being scarlatina, whooping-cough, and diarrhœa.

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WE regret to have to announce the death of Surgeon-General Dr. Bent, at Aldershot Camp, on Monday night.

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AT Malta quarantine of ten full days is now imposed on all arrivals from the port of Tripoli.

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## THE MIDDLESEX CORONERSHIP.

ON Saturday morning, Mr. Alderman and Sheriff Ellis, with his Deputy, appeared at the hustings, at Park-crescent, Portland-place, Regent's-park, to declare officially the result of the polling on the 19th inst. for the Coronership of Central Middlesex. This having been done, Dr. Hardwicke said, addressing those present, his first duty would be to thank the freeholders of the county for having re-affirmed the decision at which the supporters of the late Mr. Wakley and the late Dr. Lankester had arrived. His next duty was to record his deep regret that Dr. Lankester should have so rapidly succumbed to disease when his matured judgment, vigorous intellect, and extensive knowledge rendered his life valuable to the whole community. Next he would express his sense of the honourable and thoroughly English manner in which his opponent had conducted the contest. He trusted that he might be spared to perform efficiently the duties of his high, ancient, and honourable office. Mr. Wakley was a strong opponent of all abuses of arbitrary power in any constituted authority, and in that feeling he shared. They would all remember the case of the soldier White, who was flogged at Hounslow Barracks. It would now be known that the public were much indebted to the late Dr. Lankester for certain improvements effected in the administration of the Poor Law, owing to inquiries he caused to be made. He was an advocate for teaching the people wholesome medical truths, and for drawing attention to the advantages of making good sanitary arrangements. This work Dr. Hardwicke hoped to continue and perpetuate. They had summoned him to a great task, and to the extent of his ability and energy he was prepared to meet their demands.

# Correspondence.

"Audi alteram partem."

## THE LIFE OF DR. LANKESTER.

*To the Editor of* THE LANCET.

SIR,—Permit me to make one other, and a personal correction of your life of the late Dr. Lankester.

It is true I followed Drs. Winslow and Lankester at Saffron Walden, but I was the assistant of Mr. Thomas Browne of that place, not of Mr. Spurgin. I had nevertheless the honour of knowing Mr. Spurgin, and occasionally had the pleasure of rendering him assistance during my sojourn in Essex, and I cherish the recollection of the fact. Mr. Spurgin was to me a model practitioner of medicine, and he added to his practical knowledge a love of natural science that was most exemplary. His tastes for natural history were refined, and the excellent Natural History Museum of Saffron Walden (and it is indeed excellent) was greatly enriched by his labours.

During the long after-friendship which existed between Dr. Forbes Winslow, Dr. Lankester, and myself, I rarely met either of them in friendly communion without hearing the name of Mr. Spurgin recalled in terms of admiration and respect, which I, alas, now only remain to endorse—with all my heart. I am, Sir, yours, &c.,

Hinde-street, W., Nov. 24th, 1874. B. W. RICHARDSON.

## DR. BUZZARD'S PAPER AT THE CLINICAL SOCIETY.

*To the Editor of* THE LANCET.

SIR,—I was interested in reading the discussion on Dr. Buzzard's case at the Clinical Society in last week's LANCET, but I cannot see that it deserves the name of melancholia. The name one gives to cases is not of much importance perhaps, but I should prefer to call such a case one of acute dementia. The essence of the case is the paralysis of the will, the intellect being clear. In thirteen years' experience in public asylums I have had many such cases, and found they generally recovered suddenly, and never benefited by drugs. A pauper would stand a better chance than a rich man in an asylum, as the former would be bustled about and more or less forced to employ himself, and this would be rational treatment; while the latter would be condemned to genteel idleness—the worst thing that could happen to him. I should also like to know how it happens that a "private" patient can require to be fed 8700 times, whereas such a thing is unknown in public asylums where thousands of cases are treated every year. For my part I believe such treatment to be not only needless, but injurious, as only encouraging the mental condition at fault.

I am, Sir, yours &c.,

Cambs County Asylum. G. M. BACON, M.D.

## PRELIMINARY EXAMINATION AT THE COLLEGE OF SURGEONS.

*To the Editor of* THE LANCET.

SIR,—Will you allow me to draw your attention to the exceedingly inconvenient time the Council have fixed for the Preliminary Examination at the College of Surgeons this year—the 22nd, 23rd, and 24th (Christmas Eve), the week *after* the school holidays begin?

I have a son who has been preparing for the examination, along with several others, at Epsom College, and their holidays begin on the 18th December, so that my son will have to return to London on the Monday, attended by much additional expense, and cannot reach home again before Christmas Day, if then. Had the examination been a week or so earlier, how much more convenient it would be for such boys.

I fear it is too late to hope for any alteration this year.

I am, Sir, yours respectfully,

M. H. WALKER, M.D.

Aldborough, Darlington, Nov. 25th, 1874.

## SKETCHES OF CONTINENTAL HOSPITALS.

*(By our Special Correspondent.)*

V.—BONN.

IT is disagreeable to have to find fault with a place which contains so much to be admired as Bonn, but the truth must be spoken. In spite of the lavish expenditure of the German Government on institutes of anatomy, chemistry, natural history, astronomy, &c., the hospital of Bonn, where clinical medicine and surgery are taught, is miserably small and painfully wanting in all the requisites of a good modern hospital. Plans of a new building were prepared before the breaking out of the Franco-German war, but from different causes—not the least being the question as to whether the pavilion or the barrack system should be adopted—the new hospital has not yet been commenced. The present hospital was formerly the palace of the archbishops of Cologne, and however well adapted for its original purpose it may have been, it is quite unsuited to its present uses. The wards are low, ill-lighted, and ill-ventilated; erysipelas and pyæmia linger about them continually, and hospital gangrene is sometimes met with. In spite of all these drawbacks, the clinical teaching is excellent, and though the number of students (137) has been somewhat reduced by the superior attractions offered by the new Germanised University of Strasburg, it is still anything but contemptible. The staff consists of one physician (Prof. Rueble), with two assistants; one surgeon (Prof. Busch), with three assistants; and one ophthalmic surgeon (Prof. Saemisch), who has one assistant. There are also special departments for gynæcology (with a separate hospital), under Prof. Veit; for morbid anatomy, under Prof. Koester; and for pharmacology, controlled by Prof. Binz, who has also a special out-patient clinic for children. The operating theatre is tolerably convenient, and the lighting is fair; adjoining it are rooms, one used for instruments, and one, which is larger, serves as a pathological museum. It is too small for the purpose, and the specimens are quite without arrangement—a circumstance to be the more regretted as many of them, especially the casts of dislocations and fractures, are valuable. All the patients admitted either themselves pay for their board and residence, or the cost is defrayed by their friends or by the *commune* to which they belong. They are arranged in three classes: the first, who pay about five shillings a day, have a private room to themselves; the second, who pay three shillings, are placed in wards containing two or three beds; while the third, or poorest class, who are charged at the rate of about fifteenpence a day, are arranged in the ordinary wards, which each contains from six to twelve beds. A somewhat similar scale of charges is exacted in all the German hospitals, but the physicians and surgeons have the privilege of admitting any special case and of retaining it in the hospital without any payment as long as they like, and they do not hesitate frequently to avail themselves of the permission.

At Bonn most fractures are treated by the gypsum bandage, hip disease by extension. Lister's dressing of wounds is both understood and efficiently carried out. Erysipelas is treated by application of powdered starch; arteries are generally secured with catgut ligatures, and neither torsion nor acupressure is resorted to; amputations are commonly performed with skin flaps, a circular sweep being then made through the muscles. For caries or severe injuries of the tarsus Syme's amputation appears to be the favourite. Prof. Busch is fully conversant with the English language and English surgical practice. He performs resections of joints frequently, and with good results. Two resections of the wrist have recently turned out well, and he has at the present time under his care resections of the hip-, shoulder-, and knee-joints. One specimen of resection of the latter joint in a boy aged nine was not looking well, but a case of the same operation in a man aged twenty-five, where the patella had also been removed for caries, presented a very good result.

The new Gynæcological Institute, situate on the banks of the Rhine, and which has only been opened about eighteen months, is well worth a visit. The central part contains the administrative offices, operating theatre, &c., and the wards are placed in the lateral wings. There are thirty

beds for cases of midwifery and thirty for diseases of women, and there are also three small special rooms for contagious diseases, which, however, were unoccupied at the time of my visit. It is a singular fact that puerperal fever broke out immediately after the opening of the hospital, and six patients died from it, while since that time there has not been a single case of the disease. The women are placed in a special room at the back of the hospital while delivery is going on, and as soon as they are confined are removed to wards in the vicinity, each of which contains four beds, and is so large and airy that the cubic space amounts to 8000 cubic feet. There is a magnificent operating theatre, thirty-six feet in height, with large windows occupying the whole of one side, and offering a glorious view of the Rhine. On one side are a museum and instrument room, on the other a commodious lecture theatre. On the vast open space at the back of this women's hospital it is proposed to build the new general hospital, and between the two buildings a suitable place for making pathological examinations and for keeping specimens will also be erected.

In addition to the institutions already named, Bonn possesses two special religious hospitals—one for Protestants and the other for Catholics, both of which are open to students for clinical purposes. They are not, however, so much frequented by the students as they might be; the men will go to the old clinical hospital, attracted no doubt by the reputation of its staff and by the fact that it is the University hospital.

## LIVERPOOL.

*(From our own Correspondent.)*

AT the last meeting of the Liverpool Medical Institution Dr. Nevins read a communication, founded on a report prepared by himself for the Home Secretary, on the results of the Contagious Diseases Acts. The paper was based upon statistics, and the conclusions arrived at by the author were as follows:—"That for several years before the first Act was passed great improvement had been taking place in the health of the army in this particular form of disease; that immediately upon the introduction of the Acts there was a temporary rapid increase in these diseases; that this increase generally ceased within twelve months in one form, but that in another form there has been a permanent increase throughout both army and navy, which continues to the present time; that the improvement in health in one of these forms of diseases still continues upon the whole, but with a very diminished rate; that in the British navy throughout the world the health of the sailors occupies a more unfavourable position in these forms of disease in the Home and Mediterranean stations than in those stations which are not under laws similar to the Contagious Diseases Acts; that the ratio of disease amongst the registered prostitutes had increased above 20 per cent. since the Act of 1866, and that the ratio of deaths amongst them had more than doubled since that date; that the fluctuations of these diseases have been so great from year to year, both before and since the application of the Acts, that no opinion of any value can be formed from a short period or a limited number of men; and that the results now arrived at are a total experience of the whole British army at home and the navy throughout the world, extending over a period of twelve years—the longest time that the official documents render possible."

The discussion that followed was not of a satisfactory nature, inasmuch as the members, having no previous means of testing the accuracy of the mass of figures presented to them, were in a measure unprepared to criticise the deductions drawn. When it is considered how statistics may be twisted and distorted, it would be impossible to accept Dr. Nevin's conclusions without a very close examination of the sources from which they were derived, and the mode in which they were employed. To meet the great diminution in cases of syphilis occurring in the army since the application of the Acts, an ingenious table was compiled to show that this was traceable to the ordinary ups and downs of disease rather than to the efforts of preventive medicine. This very pleasant way of getting over a rather awkward fact was evidently much appreciated by those whose sympathies were not with the Acts. Amongst the speakers who in the course of the discussion opposed facts to figures, was Mr. Acton, of London, who appeared to watch with very considerable interest the proceedings of the evening.

On the same day, it appears from a newspaper report, the Right Hon. J. Stansfeld was present at a meeting in Liverpool, where the Acts were under consideration; but as the audience included only those who, from their remarks, are regarded as opponents to the Acts, the nature of the speeches may be easily imagined.

Liverpool, Nov. 9th, 1874.

## IRELAND.

*(From our own Correspondent.)*

THE attention of the medical profession of Ireland and the various medical associations has lately been principally devoted towards the working of the Public Health Act, passed for this country during the last session of Parliament. Under this Act the duties are compulsorily imposed upon the members of the Poor-law Medical Service, and the remuneration is to be fixed by the various boards of guardians as rural, and the corporations and town commissioners as urban authorities, subject to the approval of the Local Government Board. A great diversity of opinion appears to exist amongst both rural and urban authorities as to the sum to be paid their medical officers of health for performing these duties, which have been described in a memorial presented to the chief secretary for Ireland, the Right Hon. Sir Michael Hicks Beach, who is the president of the Local Government Board, by the president and fellows of the College of Physicians, as being "numerous, significant, and novel." The scale of payment proposed by the various sanitary authorities clearly proves their disbelief in the necessity for the passing of such an Act, and their intention, if possible, to convert it into a farce. From £5 to £10 is the average remuneration proposed. In some of the more enlightened neighbourhoods as high an amount as £30 has been suggested; but, strange to say, the large towns and cities, where sanitation is most required, are the most niggardly in their offers. In Dublin City, for instance, the sanitary authority offers the medical officers but £10 per annum each. These gentlemen, of course, have declined to accept such a salary, and have presented a memorial to the Local Government Board to that effect. The medical officers of Cork and Limerick and other cities, and many of the unions of Ireland, have acted in a similar manner. The various medical associations, as the Irish Poor-law Medical Officers' Association, the Irish Medical Association, and both the Colleges of Physicians and Surgeons, have addressed the Chief Secretary upon the subject. In fact, "the back of the profession is up" in this country. The memorial of the College of Physicians expresses a general approval of the provisions of the Public Health (Ireland) Act, and regards the appointment of the dispensary medical officers as sanitary officers, under section 10 of the Act, with much satisfaction, as a recognition of the necessity of placing the medical profession in the foremost rank of an organisation for purposes of public health. It adds:—"That they [the memorialists] are fully conscious of the number, significance, and novelty of the duties which will have to be discharged by the sanitary officers under the Act—the most important of which duties can only be efficiently performed by medical men, in consequence of their education, qualifications, and training. That the responsibility of carrying into effect the principal of these duties—namely, the reporting upon nuisances, the investigation of outbreaks of preventable disease, the prevention of the spread of sickness, the examination of air, water, and food; the drawing up of periodical reports on the health of sanitary districts, and the compilation of statistics of disease, is especially imposed upon the medical sanitary officers. That the remuneration so far offered by the local sanitary authorities to the medical officers of health is quite inadequate, when regard is had to the multifarious and very responsible nature of the duties to be performed by them,

and to the qualifications required of them. Lastly and especially, that the interests of the community at large imperatively demand, on the grounds equally of humanity, justice, and economy, that the Public Health Act should be carried into effect in the best manner, and by willing officers. For all these reasons, your memorialists respectfully pray that you will take steps to secure a favourable consideration of the question of the apportionment of equitable and sufficient remuneration to the sanitary medical officers of Ireland in their endeavour to advance the public weal."

The Local Government Board, on the other hand, having issued a very elaborate series of general orders under the provisions of the Act, and also instructional circulars, have suggested that an addition of one-fourth of the present salary should represent the maximum remuneration for the performance of the duties enforced upon sanitary medical officers. Now, considering that the Poor-law medical officers throughout Ireland are at present most miserably paid, say on an average about £100 a year; that they attend one-fourth of the population; that the elasticity of the Medical Charities Act is such that *any person* in Ireland can obtain gratuitous medical relief, a circumstance which of course interferes greatly with private practice; that their respective districts average fifty square miles in extent, with an average population of from 7000 to 8000 inhabitants,—the idea, as expressed lately at several meetings of the various medical associations, and of both the Colleges of Physicians and Surgeons, that the *minimum* remuneration should be fixed at at least one-fourth of the present salary, and upon a sliding scale, based upon the area of the district and the density of the population, appears to be moderate. And this proposition seemed to meet with the approval of both the urban and rural sanitary medical officers of health. If the authorities do not take into consideration the just claims of the medical officers of health under this Act, and fairly remunerate them so that their zeal may be enlisted in the cause of sanitation and their willing co-operation secured, it would be much better that it had never passed, for there could hardly be a greater or a more dangerous sham than a sham belief in immunity from preventable disease. It is therefore hoped and believed that the Local Government Board will exercise that firmness that marked the career of the Poor-law Commissioners, and insist upon local boards giving fair remuneration to their medical officers of health.

Hospital Sunday has at last been inaugurated in Dublin, and the result up to the present is of a favourable character. Several hospitals declined to join in the cause on the plea that it might interfere with their regular subscriptions. Cardinal Cullen is said not to have been friendly towards the movement either. Be that as it may, however, the collections have already amounted to close upon £3000, and as yet some forty churches have not sent in their returns. Even the most energetic promoters of the Hospital Sunday movement did not believe that the amount would have at all reached this sum, which, on a comparison of population, would represent some £40,000 for London, a sum which has not yet been arrived at. As a proof that it does not interfere with the subscriptions of the philanthropists whose names appear in the reports of these charitable institutions it may be mentioned that the American evangelisers, Messrs. Moody and Sankey, who are creating quite a *furore* here at present, held two services for the benefit of the Dublin hospitals—one for children, at which was contributed in pennies over £60; and a general service, at which was collected in small sums over £200, making in all nearly £300, the largest contribution from any congregation in Dublin.

Dublin, Nov. 18th, 1874.

BEQUESTS &C. TO MEDICAL CHARITIES.—MRS. Mather, of Berwick, bequeathed £1000 to the Dispensary, £250 to the Hospital for Sick Children, and £200 to the Indigent and Sick Society, all at Newcastle-on-Tyne. The Grocers' Company have given £500 in aid of the fund for building the new Hospital for Sick Children, Great Ormond-street. The North-Eastern Hospital for Children, Hackney-road, has received £500 from J. A. L. The Marchioness of Thomond bequeathed £100 each to the General Hospital, the United Hospital, and the Idiot Asylum, and £50 each to the Eye Infirmary and the Western Dispensary, all at Bath; and £200 to the National Hospital for the Paralysed and Epileptic, Queen-square, Bloomsbury.

# Obituary.

## EDWARD WILLSON DUFFIN, M.D., F.R.C.S.

EDWARD WILLSON DUFFIN was born at Halifax, Yorkshire, in April, 1800, and received his preliminary education at the Heath School in that town. In 1817 he matriculated at the University of Edinburgh, where he subsequently graduated in 1821, and became a Fellow of the Edinburgh College of Surgeons in the year following.

Dr. Duffin first started in practice at Edinburgh, and it was mainly through his exertions that the Dispensary for Diseases of the Skin in that city was founded. He at that time wrote several pamphlets on cutaneous subjects, and especially an essay on squamous disorders; and, in conjunction with the late Prof. Lizars, he prepared and collected a number of life-size drawings of skin diseases.

After two years his health failed him, and he was recommended to winter in Italy. He passed two years at Florence, and ultimately settled in London in 1828, and became a member of the College of Surgeons of England in 1830. Dr. Duffin was among the earliest introducers of the operation for strabismus, and pointed out the advantages of a small conjunctival wound, of regulating the amount of muscle divided, and of operating on both eyes in cases of alternate squint. In 1847 he published his work on Deformities of the Spine, pointing out especially the utility of graduated muscular exercises in the correction of lateral deformities. In 1850 he operated successfully and by a new method on a case of ovarian tumour, and in a paper published in the thirty-fourth volume of the Medico-Chirurgical Transactions he insisted upon the great value of the following modifications in the operative procedure then in vogue: 1st. Of the relatively small incision in the median line of the abdomen. 2nd. Of tying the pedicle of the tumour into the mouth of the wound so as to keep all the cut surfaces extra-peritoneal, thus avoiding the enclosing of ligatures and acquiring greater control over subsequent hæmorrhage. 3rd. Of narcotising the patient with opium, and keeping her well under its influence for many days after the operation. 4th. Keeping a relatively hot, moist atmosphere about the patient.

In 1853 Dr. Duffin was elected a Fellow of the College of Surgeons of England. He continued in active practice till about 1868, when the infirmities of advancing age compelled him to retire. He was a fellow of several learned societies, and medical adviser to the Scottish Union and Church of England Insurance Offices. He died at the residence of his son, Dr. A. B. Duffin, after a short illness, of pneumonia, consequent upon renal disease, in the seventy-fifth year of his age.

# Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having passed the required examination for the diploma, were duly admitted Members of the College on the 19th inst.:—

Barker, Henry Martyn, Bedford.
Bate, George, L.S.A., Camelford, Cornwall.
Bedford, Charles F., Sleaford, Lincolnshire.
Blackmore, George Henry, Hammersmith.
Carr, William W., M.D., Lee, Kent.
Dryland, William, Dulwich, Surrey.
Ellerton, John F. H., Huddersfield.
Gravely, William Holmwood, Horsham, Sussex.
Hoffmeister, John Bates, Cowes, Isle of Wight.
Ockendon, Arthur John, Brighton.
Parkinson, John Rendall, Preston.
Phillips, Arthur O. H., Newcastle Emlyn.
Roberts, Theophilus L., Alfreton, Derbyshire.
Ross, William A., Alderney.
Sheehy, William H. P., Claremont-square.
Verco, Joseph Cooke, Ovington-street, Chelsea.
Waudby, William, Mile-end-road.
Waller, William B., L.S.A., Sydenham.

Of the 92 candidates examined, 18 failed to satisfy the Court of Examiners, and were referred for six months' further professional study.

The following gentlemen passed the first part of the pro-

fessional examination for the Fellowship on Tuesday and Wednesday last:—

John Morgan, Bristol and Guy's Hospital; Francis Joseph Davies, University College; Joseph Wm. Anningson, Manchester; Henry Ambrose Lediard, Edinburgh; Rutherford J. Pye-Smith, Robt. Edmond Carrington, and Edward Amphlett, Guy's Hospital; William Harrison Cripps, Charles Firth, Hugh Gordon Cumming, and William Gammon Archer, St. Bartholomew's Hosp.; J. H. Morgan and Henry Blake, St. George's Hospital; Robert Henry Clarke, Cambridge and St. George's Hospital; Thomas Cranston Charles, Belfast; Ernest Tredennick, James A. M. Moullin, Henry Percy Potter, and George Henry Makins, St. Thomas's Hospital.

Of the 39 candidates examined, 20 failed to satisfy the Court, and were referred for six months' further anatomical and physiological study.

For the final Fellowship examination, which commenced on the 26th inst., there are 10 candidates.

UNIVERSITY OF LONDON.—The following is a list of the candidates who have passed the recent Second M.B. Examinations for Honours:—

MEDICINE.

FIRST CLASS.

Gould, Alfred Pearce (Scholarship and Gold Medal), Univ. Coll.
Duncan, Andrew (Gold Medal), King's College.
Eastes, Thomas, Guy's Hospital.
Duncan, Peter Thomas, University College.

SECOND CLASS.

Sturge, William Allen, University College.
Rigby, James Arthur, Guy's Hospital.
Crocker, Henry Radcliffe, University College.

OBSTETRIC MEDICINE.

FIRST CLASS.

Gould, Alfred Pearce (Scholarship and Gold Medal), Univ. Coll.
Duncan, Andrew (Gold Medal), King's College.
Eastes, Thomas, Guy's Hospital.

SECOND CLASS.

Rigby, James Arthur, Guy's Hospital.
Duncan, Peter Thomas, University College.
Sturge, William Allen, University College.
Branfoot, Henry Seymour, Guy's Hospital. } Equal.
Crocker, H. Radcliffe, University College. }

THIRD CLASS.

Nicholson, Arthur, King's College.
Harris, Vincent Dormer, St. Bartholomew's Hospital. } Equal.
Whittle, Edward George, University College. }

FORENSIC MEDICINE.

FIRST CLASS.

Crocker, H. Radcliffe (Scholarship and Gold Medal), Univ. Coll.
Gould, Alfred Pearce (Gold Medal), University College.
Duncan, Peter Thomas, University College.

SECOND CLASS.

Duncan, Andrew, King's College.
Eastes, Thomas, Guy's Hospital.

APOTHECARIES' HALL. — The following gentlemen passed their examination in the Science and Practice of Medicine and received certificates to practise on Nov. 19th:—

Johnson, Chadd Moore, Lancaster.
Lingard, Alfred, Derby.
Nicholls, Frederick, Cornwall-terrace, Stockwell.
Rawlings, Alfred, Plympton, Devon.
Reynolds, Edward Osmund, Appledore, North Devon.
Treves, Frederick, King-Edward-road, South Hackney.
Young, Arthur, Hawkhurst, Kent.

The following gentlemen passed the Primary Professional Examination on the same day:—

Badcock, George Sainthill, Charing-cross Hospital.
Champneys, Henry Laurence, Guy's Hospital.

MR. R. P. SIMPSON has qualified as a Justice of the Peace for Weymouth.

AT a late meeting of the managers of the metropolitan district asylums, the following resolution was passed:—"That the general purposes committee having expressed their opinion that the time had arrived for providing a third imbecile asylum, and recommended that it be referred to the committee for Hampstead Asylum to seek for a suitable site for the purpose, to contain from 100 to 150 acres upon which both the asylum and the proposed permanent School for Imbecile Children should be erected, it is hereby resolved to adopt the same."

MEDICAL SOCIETY, COLLEGE OF PHYSICIANS, IRELAND.—At meetings held on October 14th and November 18th, the following office-bearers were appointed for the session 1874-5:—President: James Foulis Duncan. Vice-Presidents: Sir Dominic Corrigan, Alfred Hudson, Henry Kennedy, and William Stokes. Council: J. H. Benson, J. Magee Finny, Thomas Fitzpatrick, Thomas W. Grimshaw, Thomas Hayden, James Little, John W. Moore, Stephen MacSwiney, Christopher Nixon, John Malet Purser, Gerald F. Yeo, and Arthur Wynne Foot. Honorary Secretary: G. F. Duffey.

DUBLIN OBSTETRICAL SOCIETY.—At a meeting held on the 21st inst., the following office-bearers were selected for the ensuing year:—President: Lombe Atthill. Vice-Presidents: Thomas Darby and John Comyn. Committee: Fleetwood Churchill, John Denham, George Johnston, George H. Kidd, and Alfred H. M'Clintock. Treasurer: Henry S. Halahan. Secretary: J. Rutherford Kirkpatrick.

# Medical Appointments.

ADAMS, Mr. A. M., has been appointed Public Analyst for the County of Kent: 21s. per analysis for the first 100, within a year; 10s. 6d. per analysis for the second 100; 6s. per analysis beyond.

ALLEN, J. B., L.K.Q.C.P.I., has been appointed Superintendent Medical Officer of Health for the Gorey Rural Sanitary District.

ASBURY, E. J., L.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer of Health for the East Retford Rural Sanitary District for four years.

BARRY, G. P., M.D., has been appointed Superintendent Medical Officer of Health for the Kanturk Rural Sanitary District.

BODKIN, P. J. T., L.K.Q.C.P.I., has been appointed Superintendent Medical Officer of Health for the Glennamaddy Rural Sanitary District.

BOURNES, W. H., M.D., has been appointed Superintendent Medical Officer of Health and a Sanitary Officer for the Killala Rural Sanitary District.

BRADSHAW, R., L.K.Q.C.P.I., has been appointed Superintendent Medical Officer of Health for the Carrick-on-Shannon Rural Sanitary District.

BRIERLEY, J. B., M.D., has been appointed Medical Officer for the Stretford District of the Barton-on-Irwell Union, vice Affleck, resigned.

BUDD, W. A., L.R.C.P.Ed., M.R.C.S.E., has been appointed a Surgeon to the Exeter Dispensary, vice Harris, resigned.

BURNE, J. G., L.K.Q.C.P.I., has been appointed Superintendent Medical Officer of Health for the Dublin South Rural Sanitary District.

CAMERON, C. A., M.D., has been appointed Medical Officer of Health and Analyst for the Dublin Urban Sanitary District: £300 per annum.

COOPER, C. H., L.F.P. & S.Glas., has been appointed Superintendent Medical Officer of Health for the Bandon Rural Sanitary District.

CREAN, R. J., L.K.Q.C.P.I., has been appointed Superintendent Medical Officer of Health for the Wexford Rural Sanitary District.

CURREY, J. E., M.D., has been appointed Superintendent Medical Officer of Health for the Lismore Rural Sanitary District.

DENHOLM, A., M.B., C.M., L.R.C.S.Ed., has been appointed an Assistant-Physician to the Western Infirmary, Glasgow.

DICKSON, J., M.B., L.R.C.S.Ed., has been appointed Medical Officer and Public Vaccinator for No. 4 District of the Bridlington Union, Yorkshire, vice Jackson, resigned.

FINDLAY, A. C. T., M.D., has been appointed Medical Officer for No. 2 District of the Henstead Union, Norfolk, vice M'Intyre, resigned.

FOULIS, D., M.B., C.M., has been appointed an Assistant-Surgeon to the Western Infirmary, Glasgow.

GIVEN, G. K., M.D., has been appointed Superintendent Medical Officer of Health and a Sanitary Officer for the Gortin Rural Sanitary District.

HEPBURN, D., L.D.S.R.C.S.E., has been appointed Dental House-Surgeon to the Dental Hospital of London, vice Gibbings, resigned.

JAMES, C. E., M.B., has been appointed Superintendent Medical Officer of Health for the Kilkenny Rural Sanitary District.

JOHNSTON, A., M.B., has been appointed Superintendent Medical Officer of Health and a Sanitary Officer for the Westport Rural Sanitary District.

JOYCE, L., M.R.C.S.E., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Cross-roads Dispensary District of the Dunfanaghy Union, Co. Donegal, vice Kerr, appointed to the Kinlough Dispensary District of the Ballyshannon Union.

JOYNES, F. J., M.R.C.S.E., has been appointed Medical Officer for No. 3 District of the Dursley Union, Gloucestershire.

KELLY, J. T., L.R.C.S.I., has been appointed Superintendent Medical Officer of Health and a Sanitary Officer for the Glenties Rural Sanitary District.

KINGDON, F. H., M.R.C.S.E., has been appointed a House-Surgeon to the London Hospital, vice Wreford.

LANGAN, F., L.K.Q.C.P.I., L.R.C.S.I., L.M., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Shercock Dispensary District of the Bailieborough Union, Co. Cavan, vice Caldwell, appointed to the Virginia Dispensary District of the Oldcastle Union.

LONGRIGG, Mr. D., has been appointed Surgeon to the Hearts of Oak Benefit Society for the Penge and Anerley District.

M'DONNELL, C., L.R.C.P.Ed., has been appointed Superintendent Medical Officer of Health and a Sanitary Officer for the Glin Rural Sanitary District.

MAC DONNELL, W., L.K.Q.C.P.I., has been appointed Superintendent Medical Officer of Health and a Sanitary Officer for the Limerick Rural Sanitary District.

M'KEOGH, J. J., L.R.C.P.Ed., has been appointed Superintendent Medical Officer of Health for the Kilmacthomas Rural Sanitary District.

MACLACHLAN, J., M.B., C.M., has been appointed Assistant Medical Officer to the Glamorgan County Asylum.

MACNAMARA, M., M.R.C.S.E., has been appointed Superintendent Medical Officer of Health and Sanitary Officer for the Corofin Rural Sanitary District.

MAPOTHER, E. D., M.D., has been appointed Superintendent Medical Officer of Health for the Dublin Urban Sanitary District: £300 per annum.

MAYBURY, A. V., M.D., M.R.C.S.E., has been appointed Surgeon for the South Landport District of the Portsmouth Dockyard Medical Benefit Society, vice Strickland.

MILES, J. F. M., L.R.C.P.Ed., has been appointed Superintendent Medical Officer of Health and a Sanitary Officer for the Dingle Rural Sanitary District.

MOLONY, J. F., L.R.C.P.Ed., has been appointed Superintendent Medical Officer of Health for the Ennis Rural Sanitary District.

MUNROE, A. B., M.D., C.M., has been appointed Assistant Medical Officer to the Northampton Friendly Societies' Medical Institute, vice Bolton, whose appointment has expired.

NICOLLS, P. J., M.D., has been appointed Superintendent Medical Officer of Health and a Sanitary Officer for the Navan Rural Sanitary District.

NOLAN, A. O'K., L.K.Q.C.P.I., has been appointed Superintendent Medical Officer of Health and a Sanitary Officer for the Gort Rural Sanitary District.

O'CONNOR, G. M., M.B., has been appointed Superintendent Medical Officer of Health and a Sanitary Officer for the Ballycastle Rural Sanitary District.

PENNY, R. C., L.R.C.P.Ed., has been appointed Superintendent Medical Officer of Health for the Newtownards Rural Sanitary District.

PLUMER, C. J., M.D., has been appointed an Assistant-Physician to the Western Infirmary, Glasgow.

POPE, R. H., L.R.C.P.Ed., has been appointed Superintendent Medical Officer of Health and a Sanitary Officer for the Donegal Rural Sanitary District.

RINGWOOD, J., L.K.Q.C.P.I., has been appointed Superintendent Medical Officer of Health for the Kells Rural Sanitary District.

SEYMOUR, W. F., L.K.Q.C.P.I., has been appointed Superintendent Medical Officer of Health for the Baltinglass Rural Sanitary District.

SMARTT, F. W., M.D., has been appointed Superintendent Medical Officer of Health and a Sanitary Officer for the Ballymahon Rural Sanitary District.

SMITH, T. R., M.R.C.S.E., has been appointed Medical Officer to attend Patients of St. Mary's Hospital and Dispensary for Women and Children, Manchester, at their homes, vice Leonard, resigned.

SQUIRE, S. N., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for No. 2 District of the Lexden and Winstree Union, vice Havens, deceased.

STOCKER, C. J., M.R.C.S.E., has been appointed Resident Medical Officer to the East London Hospital for Children and Dispensary for Women, vice M'Cann, deceased.

STONEY, G. L. B., L.K.Q.C.P.I., has been appointed Superintendent Medical Officer of Health for the Borrisokane Rural Sanitary District.

STRICKLAND, S., L.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer for the Railway District of the Portsea Island Union.

TROUNSELL, J. E., L.R.C.P.Ed., L.F.P. & S. Glas., has been appointed Medical Officer and Public Vaccinator for the Parishes of Westray and Papa Westray, Orkney, vice Macpherson, removed to Stromness.

TUCKEY, A. J., M.D., has been appointed Superintendent Medical Officer of Health and a Sanitary Officer for the Bantry Rural Sanitary District.

VESEY, A. B., L.K.Q.C.P.I., L.R.C.S.I., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Magherafelt Dispensary District, and Medical Officer for the Fever Infirmary and Workhouse of the Magherafelt Union, Co. Londonderry, vice John S. Vesey, M.D., deceased; and Superintendent Medical Officer of Health and a Sanitary Officer for the Magherafelt Rural Sanitary District.

WILLIAMS, W., M.B., M.R.C.S.E., has been appointed Medical Superintendent of the North Wales Counties Lunatic Asylum, Denbigh, vice Jones, resigned and superannuated.

WILLIAMSON, G. E., M.R.C.S.E., has been appointed a House-Surgeon to the London Hospital, vice Herman.

WRANGHAM, J. D., M.D., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Hainton District of the Louth Union, vice Hay, resigned.

# Births, Marriages, and Deaths.

## BIRTHS.

BURWOOD.—On the 16th inst., at Strathmore Lodge, Florence-road, Ealing, the wife of T. W. Burwood, L.K.Q.C.P.I., of a son.

EDGELOW.—On the 17th inst., at Hertford-street, Mayfair, the wife of Geo. Edgelow, M.D., of a son.

MILLER.—On the 17th inst., at Blackheath, the wife of J. N. Miller, M.D., of a son.

MORRIS.—On the 19th inst., at Lower Edmonton, the wife of C. J. Morris, M.R.C.S.E., of a daughter.

PRESTON.—On the 19th inst., at the Curragh Camp, Co. Kildare, the wife of A. F. Preston, M.B., Staff Surgeon Army, of a daughter.

STEWART.—On the 8th inst., at Aldershot, the wife of W. Stewart, M.D., Surgeon-Major 2nd Batt. 21st Fusiliers, of a daughter.

## MARRIAGES.

BRIETZCKE—SMITH.—On the 14th ult., at Edinburgh, Henry Brietzcke, L.R.C.P.L., M.R.C.S.E., to Helen Kate, daughter of the late David Smith, Esq.

HOPCROFT—BOWIE.—On the 15th ult., at St. George's, Campdell-hill, Thos. Fay Hopcroft, M.R.C.S.E., to Elizabeth Thurburn, daughter of the late Wm. Bowie, Esq.

TIMMINS—BUCKLEY.—On the 3rd inst., at All Saints, Llanelly, John Aaron James Timmins, M.D., to Mary Anne, daughter of James Buckley, Esq.

## DEATHS.

BIRD.—On the 23rd inst., Annie, the beloved wife of Peter Hinckes Bird, F.R.C.S., of Norfolk-square, W., and Lytham, Lancashire.

CUMMING.—On the 19th inst., at Glasgow, Wm. Cumming, M.D., of Wigtown, aged 33.

HAYWARD.—On the 19th inst., Geo. Hayward, M.D., of Ealing, formerly of Leeds.

HUNTINGTON.—On the 15th inst., F. Huntingdon, F.R.C.S.E., of Hull.

JAY.—On the 19th inst., at St. Stephen's-square, Norwich, Mary, widow of S. Jay, M.R.C.S.E., of Great Yarmouth, and daughter of the late Daniel Hook, Esq., of Great Yarmouth, aged 63.

MITCHELL.—On the 16th inst., at Pentney Vicarage, Norfolk, Thos. Robinson Mitchell, M.D., of Jarrow-on-Tyne, aged 58.

PEARLESS.—On the 19th inst. (after a few days' illness from diphtheria, leaving a widow and three infant children), Charles Durrant Pearless, M.R.C.S.E., L.R.C.P.L., of The Vicarage, Sevenoaks (third son of Wm. Pearless, Esq., of The Hermitage, East Grinstead), aged 32.

RAYNER.—On the 9th inst., A. P. Rayner, M.R.C.S.E., of Shawbury, Salop.

STEVENS.—On the 5th inst., J. N. Stevens, M.R.C.S.E., of Princess-place, Plymouth, aged 63.

*[N.B.—A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.]*

# Notes, Short Comments, and Answers to Correspondents.

FATAL HÆMORRHAGE FROM A UTERINE SINUS.

M. DEPAUL, the eminent obstetrician of Paris, lately mentioned a peculiar case before the Surgical Society. In 1869 he had attended a woman in labour affected with rickets, and had been obliged to break up the head. Quite lately she again fell in the family way, and M. Depaul determined to excite premature labour. The antero-posterior diameter was three inches and a half. Tarnier's tube was introduced into the uterus, and gave rise to some pains, but the tube slipped out twenty-four hours afterwards. The author was getting ready with the prepared sponge, when the patient was seized with violent pain in the upper part of the abdomen on getting out of bed. She grew very pale, and died in a few hours. The Cæsarean operation was performed, but the fœtus was dead. A perforation was found at the posterior and superior portion of the uterus, and around the hole were noticed large subperitoneal sinuses. The opening corresponded with the placenta, which, on being detected, was found to be more adherent than usual. In 1869 the placenta had been removed by the hand of the accoucheur passed into the uterus. The uterine walls were very thin around the perforation, and had undergone fatty degeneration. No blood was found in the womb, but three pounds of it were taken from the abdominal cavity. A sinus was observed, which looked worn out and severed just by the perforation. Through this the blood had escaped, and the continual loss had killed her in three hours.

*H. D. W.*—A candidate at the pass examination for the M.R.C.S. is not examined twice by the same examiner in the library; but it may happen that he may be questioned on a patient downstairs and again upstairs by the same examiner.

*Dr. Burney Yeo's* lecture shall be published in our next impression.

SALICYLIC ACID.

*To the Editor of* THE LANCET.

SIR,—Will you allow me sufficient of your valuable space to call attention to a new disinfectant—namely, salicylic acid, the powerful working of which, together with a new method of obtaining it, were both discovered and thoroughly substantiated by numerous experiments made but a few months since in the laboratory of Dr. Kolbe, Professor of Chemistry at the Royal University of Leipzig, and confirmed by others at the hands of those able writers and profound clinical teachers, Thiersch and Wunderlich.

The acid itself was already known to the scientific world; but the properties above mentioned lay hidden in darkness when Kolbe's talent brought them to light. Until then carbolic acid led the long list of disinfectants. Indubitably salicylic acid, while disinfecting as completely as carbolic acid, possesses a great advantage—viz., inodorous itself, it utterly destroys and eradicates all odours or stenches of whatever nature they be. Thiersch placed in two test glasses an equal quantity of human urine, adding to the one a small proportion of dilute salicylic acid, and to the other exactly the same proportion of carbolic acid. Both became at once freed from urate of ammonia, and at the end of two weeks, during which period they were allowed to stand, neither contained any trace of organic matter, the former being entirely sans odour, the latter emitting an offensive smell of carbolic acid. The professor, lately performing amputations of the humerus and femur, dressed the stumps in every case with salicylic acid. The bandages (Lister's) were allowed to remain until the fifth day, when upon removal there was not the slightest odour perceptible about either the wounds or the dressings, nor had suppuration set in. It was then applied to carcinoma, with the remarkable success of causing the cancerous secretion and odour to cease within forty-eight hours, three applications only having been made. At a subsequent meeting of the Medical Board, the learned gentleman expressed his satisfaction with the investigations made, as well as his intention of introducing salicylic acid into general use in the surgical department.

After a consultation with Prof. Wunderlich, I took the dejecta of a patient suffering from catarrhus intestinalis, and treated the same in three different glasses in the following manner:—In the first was left a portion of the fæces without chemical addition; into the second was thrown an equal part of the fæcal matter, to which was added two drachms of salicylic acid in a solution of 1·25; into the third, *cæteris paribus*, carbolic acid. The glasses were then placed in the open air. A microscopical examination at the end of twenty-four hours showed that the first glass contained those forms of decomposition designated as leptothrix and ciliated infusoria; that the second and third, on the contrary, were quite devoid of either vegetable or animal parasites. On the second day the preparations were again examined at the Pathological Institute, under the supervision of Prof. Wagner, with like issue. On the third day, however, the parasites were more numerous than in the previous occasions, while the infusions had became still clearer. From one of them no odour whatsoever could be detected; but the other exhaled strongly that of carbolic acid. Another similar test was subsequently made by the pharmaceutist of St. Jacob's Hospital, but with a solution of salicylic acid of only 1·300. Upon the ninth day he was unable to detect any signs of decomposing substances.

The acid is at present being given per orem as an antipyretic in doses of ten grains three times a day. Heated to a temperature of 70° Celsius, it resolves itself into carbolic acid, from which latter it is obtained by Kolbe, although it can also be won from salicin (not to be confounded with *salicinic* acid), originally from the salix alba. Prof. Ludwig is of opinion that salicylic acid may be used as a means of preserving anatomical preparations, which experiment is indeed being made in the museum of that distinguished physiologist.

I am, Sir, your obedient servant,

GEORGE H. BOYLAND, M.D.,
Laureate of the Leipzig Medical Faculty,
Ex-Surgeon in the French Army.

Baltimore, Nov. 9th, 1874.

### INDISPENSABLE CAUTION.

SURGEONS should endeavour to have witnesses whenever ether or chloroform is administered to women. On this subject some observations have lately been published by an American physician, which are as follows:—A strong genetic excitement may occur in women under the influence of an anæsthetic, and this sensation creates in her the belief that she is being criminally assaulted. As an example of this, the author quotes the case of a dentist who was imprisoned for having taken advantage of a lady narcotised with chloroform, but whose innocence was subsequently rendered so evident that he was released. Another case is mentioned, in which the patient was in labour, and after having been rendered insensible with chloroform she called out for her husband to protect her against her medical man, who, she said, was assaulting her. The husband was at the time by the bedside. In another case chloroform was being administered to a lady preparatory to the extraction of a tooth. Her looks and demeanour soon proved that she was under the influence of a peculiar excitement, and the dentist wisely hastened to call her friends into the room. On waking, the patient was surprised to see people around her, and confessed that she had had the peculiar hallucinations just alluded to.

*Eclectic* wishes to know if there is any work published giving a complete history of medicine and surgery and medical and surgical practice from the very earliest times up to the present day, and treating of homœo-, allo-, hydro-, and hetero-pathy, stating the "principles" on which these systems are based.

*Professor Welch* is thanked. The article shall be published next week.

### HYDROPHOBIA IN INDIA.

*To the Editor of* THE LANCET.

SIR,—Having lately read in THE LANCET several articles and letters on the above subject, I am induced to send you the following notes, which may prove interesting to your readers.

When quartered at Jubbulpore, in the Central Provinces, in 1866, being then in medical charge of D Battery, 16th Brigade, R.A., on arrival at my hospital one morning I found that one of our men had been severely bitten by a mad dog under the following circumstances:—About 400 yards from the hospital, and about half a mile from a native village, was situated the "ration stand," at which place the bread and meat was issued for the men of the battery. The native butcher was in the act of cutting up the meat, when the cry of "Pagali kutta" (mad dog) was raised, with a general scampering of the native cooks in every direction. Almost immediately a large and powerful pariah dog rushed into the open shed, and seized the butcher by the leg, about the lower part of the calf, biting him severely on a part *uncovered by clothes*, and inflicting a rather severe lacerated wound. The wheeler of the battery, a low-sized, powerful man (Bell by name), chanced to be passing, and the dog, quitting his hold of the native, attacked Bell, and caught him by the leg, biting him through a pair of cotton drill overalls. The wheeler, with great pluck, stooped down and laid hold of the animal by the neck, and, to make a long story short, strangled him, luckily sustaining no other injury while performing the courageous act, merely saying he would take good care he should bite no one else. Both men were immediately taken to the hospital, where their wounds were freely cauterised with pure nitric acid down to the bottom of each tooth-hole, and neither of them ever had a bad symptom afterwards. The native I lost sight of about eight months subsequently; but the wheeler was in the battery with me for three years, and in 1870 I saw him at Netley, he having been invalided home for sunstroke.

It may be said there is no proof of the dog being mad; but of this there was strong evidence. I sent my native doctor to make inquiries in the villages near the lines, and he found that the very morning the above incident happened a large and savage pariah dog had "run a muck" through a village about half a mile distant, from the direction of which the dog had been seen to come, and had there bitten several natives and a bullock. A few days after this I left the station on a shooting excursion, and was absent for rather more than a month; but on my return I caused inquiries to be made concerning the bitten men, and, sad to say, received the intelligence that no fewer than five human beings (and the bullock) had died of hydrophobia. I sent my apothecary, a very intelligent young man, to make inquiries, and he assured me the report was true, and that he had seen one man himself in undoubted hydrophobia, and moribund, and that the others had died, and their bodies been burnt. All the natives were bitten on exposed parts of the body; yet the only one who had escaped was the native butcher, who was cauterised. The wheeler had, *à priori*, a better chance of escape, as he was bitten through his clothes. Still I think it will be allowed that in all probability he owed his life to the immediate destruction of the virus with nitric acid.

The popular delusion concerning the greater prevalence of hydrophobia in hot weather is contradicted by Indian experience, as in that country the disease is comparatively rare, and the above is the only positive instance that came under my notice during a residence of nine years in the country. I have on two occasions shot dogs that were declared by the natives to be mad, and they may have been so; but starvation and mange, with ill-treatment, will soon reduce a dog to such a miserable condition that when he gets outside his own village, where he is known, once raise the cry of "Mad dog," and he is hunted to death, often in his misery snapping at every man or animal in his way.

Jackals do occasionally, it is said, suffer from hydrophobia, and when in a rabid state would, no doubt, be very dangerous, owing to their superior activity and sharp teeth; but I have never been able myself to trace a case, and am inclined to think that the stories one hears about them are on a par with the celebrated bis-cobra or poisonous lizard, which every native is prepared to swear exists, and whose bite is declared to be more fatal than a cobra's. I have never, of course, been able to procure a specimen, though I have offered large rewards to the men who were most positive as to its existence. I have frequently heard even educated people in India persist in declaring their belief in such an animal, though it is well known that no poisonous lizard has ever been discovered by naturalists.

I remain, Sir, yours truly,

J. B. HAMILTON, M.D.,
Chatham, Nov. 16th, 1874. Surgeon, Army Medical Department.

### SCIENTIFIC GRANTS.

WE announced lately that the British Medical Association had at its annual meeting authorised a grant for 1875 of sums, not to exceed a total of £200, in aid of original researches in medicine and the allied sciences. We are requested to state that at the last meeting of the Committee of Council the time for receiving such applications was further extended till the 27th December next. The Committee appointed to receive and report on the applications consists of Dr. Sibson, F.R.S., Chairman; the President of the Council, Mr. Southam; and the Treasurer, Dr. Falconer (*ex-officio* members); Mr. Baker; Dr. Bastian, F.R.S.; Dr. Lauder Brunton, F.R.S.; Mr. Callender, F.R.S.; Dr. Michael Foster, F.R.S.; Mr. Hart; Dr. Sharpey, F.R.S.; Dr. Burdon-Sanderson, F.R.S.; Dr. W. F. Wade; Mr. Wheelhouse; and Dr. S. Wilks, F.R.S. Applications should be addressed to Dr. Sibson, Chairman of the Committee, 59, Brook-street; or to the General Secretary of the Association, Great Queen-street, W.C.

*C. L. M.*—The practitioner summoned to give evidence and required to make a post-mortem had, of course, no option but to accede, and was entitled to the fees.

THE letter of *Dr. Weakes* shall have the earliest consideration.

### A PHASE OF PROFESSIONAL ETIQUETTE.

*To the Editor of* THE LANCET.

SIR,—The enclosed correspondence, which I ask you kindly to publish in your next issue, was called forth by Dr. Ireland being sent for late one evening to an old patient of mine, on whom I had been in regular attendance five days, and who had been suddenly taken worse. Without going into the minutiæ of the case, it appears to me that when a medical man is called in to see the patient of another *in an emergency*, it is hardly fair or honourable to endeavour to obtain the patient on his own account, as in this instance was done. Hence my letter to Dr. Ireland, which produced the enclosed reply. Comment upon such a production is entirely superfluous; the style and language of it will, doubtless, have their due weight with your readers. I have only to add the patient has since called upon me, and, having been shown Dr. Ireland's letter, repudiated the allegation that he was dissatisfied with my attendance, making a very different statement to that with which Dr. Ireland has endeavoured to palliate this conduct. Faithfully yours,

Liverpool, Nov. 16th, 1874. GOODALL JONES, M.D.

Liverpool, Nov. 9th, 1874.

SIR,—I think if you refer to your medical friends you will see that you have acted in a very unprofessional manner in Lynch's case. Will you inform me if such is your usual line of conduct when called, in an emergency, to the patient of another surgeon? Yours truly,

Dr. Ireland. GOODALL JONES.

18, Heyworth-street, Nov. 10th, 1874.

SIR,—I have received your very impudent letter concerning a case I have been called to see, now my patient owing solely to the fact that they considered you guilty of gross neglect of their child they probably have told you so as well as me.

Now having informed you so much permit me to tell you I have as good an idea and as keen a sense of what professional ettiquette (*sic*) is or rather should be as you or any of my medical friends can have. I told you I wished to act in no other spirit when I had an interview with you and challenged you to point out where I had erred and you could not do so. As to the request that I should inform you if such was my usual course, I have only to say that the question shows as much ignorance as it does impudence (remember I mean in a social point of view for I know nothing of your professional capacity) coming as it does from one of whom I know nothing or don't desire to know anything.

I wonder who you fancy yourself to be that you think you are entitled to demand from me an answer to such a question! My answer is this Sir that I consider myself in every way at least your equal if not your superior in professional conduct attainments and all other attributes that constitutes the *Gentleman (sic)* and if as the Lynch's say you had not neglected your patient you would not have had cause to feel agrieved (*sic*) or have been put aside for another.

Now having spoken my mind to you I shall take no notice of any further correspondence on the subject.

I am, Sir, yours truly,

RICHD. J. IRELAND.

P.S.—Make any use you please of this letter.
Dr. Goodall Jones, 6, Prince Edwin-street.

[Copied *verbatim et literatim*.]

*** In the above case there is an unfortunate discrepancy in the statement of facts which renders it difficult to say whether Dr. Ireland had not some ground, in the dissatisfaction of the friends, for taking charge of the case. But even in this case he should have written a very different letter to Dr. Goodall Jones, who, without explanation, had a right to feel aggrieved. The errors of Dr. Ireland's letter need not be pointed out. As far as they have reference to the structure of words, they may be allowed to pass as within the range of liberty in a free country; but so far as they refer to feeling and taste, they cannot be too little copied in correspondence on reasonable questions of professional ethics.—ED. L.

### THE LATE ELECTION FOR THE CORONERSHIP.

WE made a slight numerical error last week in our record of the result of this contest. The majority by which Dr. Hardwicke was elected was 255, the numbers being as follows:—Hardwicke, 1105; Boulton, 850.

*M.R.C.P.*—Our correspondent should write to the Deans of the principal Continental universities for particulars of the conditions on which they grant their degrees. That of Giessen grants degrees on such terms as he indicates. The medical diploma would take precedence if a question of precedence can be raised.

*Mr. H. Barrett* is thanked. The subject shall be noticed at an early date.

### DR. LAMBART, OF LIVERPOOL.

LIVERPOOL again enjoys the advantage of Dr. Lambart's Lectures to the People on Sunday afternoons. Dr. Lambart's titles are thus described in the Medical Directory: M.A. Oxon.; M.D. and M.B. Dublin, 1870; M.R.C.S., 1870; Mem. Brit. Med. Ass.; author of the Warneford Essay on Skin Diseases. His last discourse was on "Pain and Painkillers." Speaking generally, and indeed with only one exception, his remarks seem to have been of the most ordinary and common-place character. The learned lecturer did, however, according to the newspapers, make one remarkable observation, or rather a promise, when speaking of rheumatism—viz., that he would remove from any one sufferer present, in less than five minutes, pains of weeks' standing, no matter how severe This promise probably redeemed the lecture from being very tame. It is not recorded that the lecturer cured the rheumatic patients on the spot. We should have been glad to have heard of the lame being made to leap. It is always suspicious when a man who has such powers has to hire a public room, and proclaim the secret in a lecture on a Sunday afternoon. We can understand a humane man doing cures on a Sunday; but he should not talk about them.

*J. D.*, (Mentone.)—It all depends upon the state of health and vigour of the individual. Supposing his general health to be good, and there be no predisposition to pulmonary disease, we consider the risk would be so very insignificant as, practically, to amount to none at all.

*Prof. Duncan's* letter arrived too late for insertion this week. It shall, however, appear in our next number.

*Mr. J. J. Churchill.*—We never recommend a particular physician.

### THE LEGALITY OF VACCINATION BY STUDENTS: VACCINATION AT HOSPITALS.

*To the Editor of* THE LANCET.

SIR,—I beg to submit to you the question whether those registered medical practitioners who sign the certificates of successful vaccination when the operation has been performed by a student do not render themselves liable to prosecution under the 7th section of the Vaccination Amendment Act, 1867, which says: "Every person who wilfully signs a false certificate or duplicate under this section shall be guilty of a misdemeanor, and be liable to fine or imprisonment, with or without hard labour, for a period not exceeding two years. The form of certificate runs thus: "I certify that A. B. has been successfully vaccinated by me, C. D., registered medical practitioner." I submit, therefore, that anyone who signs this certificate, and does not actually vaccinate the child, is liable under the above section. Section 12 of the same Act enables a public vaccinator to give, at the request of the parent, a certificate of successful vaccination in respect of any child whom he may have examined and found to have been successfully vaccinated, although he may not have performed the operation. I infer from this that the only persons who can legally give practice in vaccination to medical students are public vaccinators.

I am, Sir, yours truly,
MEREDITH TOWNSEND,
Public Vaccinator to the Town District of
Kensington, Nov. 14th, 1874. Kensington.

### RICHARDSON'S COLONIST'S COMPACT MEDICINE CHEST.

MESSRS. J. RICHARDSON AND CO., manufacturing pharmaceutical chemists, Leicester, have submitted to our inspection a very well arranged little medicine chest. It is fitted up with twelve varieties of coated pills and a bottle of chlorodyne, and contains a handbook, giving full directions regarding the use of the remedies, and the diseases and affections for which they are suited, together with a chapter on cookery for the sick, and appliances in illness. Colonists, travellers, and others, who are debarred from regular medical advice, will find Messrs. Richardson's preparations extremely useful. The chest is handsomely fitted up, and is sold complete for 24*s.*

*Juvenis.*—1. Hardly sufficient.—2. Erichsen's book.

### LOUISE LATEAU.

*To the Editor of* THE LANCET.

SIR,—Will you be so kind as to inform me of what peculiarity does "Louise Lateau" labour under, and also in what does "stigmatising" consist? I have applied to several of my medical brethren, but they were unable to enlighten me. Yours sincerely,
High Wycombe, Nov. 15th, 1874. H. R. R.

*** The term "stigmata" was first used by the theologians to indicate bleeding points on the surface of the body. It originated with the Franciscans. St. Francis, the founder of their Order, during the feast of the Exaltation in 1224, went to the top of Mount Alvernus, in Tuscany, for meditation. There he had a vision of an angel bearing the form of a cross, and on recovering from his reverie he found his hands and feet bleeding as if he had been nailed to a cross, while points of blood had exuded from his side. The bleeding points, which for a time were concealed by St. Francis, were called *stigmata* by the monks of the Order, and a feast of the stigmata, with an appropriate mass, was afterwards celebrated by them annually. Such is the theological origin of the phenomenon. Its latest pathological exposition will be found in the annotation on the subject in this number of THE LANCET.—ED. L.

### THE CONTAGIOUS DISEASES ACTS.

WE are compelled to defer the publication of an article on Dr. Nevins' (of Liverpool) recent statement on the above subject until next week.

*Chirurgicus.*—The first course is unusual. The second might be taken without unfriendliness, though it might imply less proper feelings.

THE letter of *Dr. John Ringland* (Dublin) shall receive attention.

### WORKMEN AND THE HOSPITAL SUNDAY FUND.

OUR attention has properly been drawn to an error in our article of last week, in which we said that the Hospital Sunday Council had received last year from working men a sum of nearly £2000. We made this statement on the strength of a somewhat vague sentence in the Preface of Low's Handbook of the Charities of London. The sum actually contributed by the workmen, distinct from what they gave in churches, was £244 7*s.* 6*d.* This was given, however, spontaneously, and without any special machinery; and we must reiterate our surprise that, with all the special machinery of the *Hospital Saturday Fund*, the contributions of the workmen to institutions by which they almost exclusively benefit were so small. What is the explanation?

*Mr. Mocatta* (Brighton) is thanked for his communication.

### THE AMENITIES OF PRACTICE.

*To the Editor of* THE LANCET.

SIR,—Your correspondent, "L.R.C.P.," in last week's issue calls my conduct into question in a manner quite the reverse of polite, and, as I acted from the best of motives, I should be glad to be favoured with your opinion on the point. I am called upon one morning by some one of whom I know nothing, and whom I do not recollect ever seeing before, who requests the loan of some ergot, telling me at the same time that he is assisting another practitioner in the town. My natural course was to ask him for some support, or at least for a card, telling him that could he give me any credentials he was welcome to all the ergot I had in the place, and pointing out to him that, as I had nothing to rely upon but his bare assertion that he was a medical man, I should be compelled to refuse.

The question I wish to ask is, Whether I should be *morally* justified in giving any stranger a drug of the kind without some proof of his being in the profession? I would also ask whether your columns are graced by the admittance of letters couched in such "calling-names" style as the one in which I am so *courteously* designated as "THE PERSON."
November, 1874.

*** The question is one that does not admit of a dogmatic answer. On the whole, we think that the representations made by "L.R.C.P." were sufficient to justify our present correspondent in granting the ergot unsuspiciously.—ED. L.

*Mr. Thomas Worth*, (Nottingham.)—Although we are not responsible for the figures and deductions, we have every confidence in the ability of the gentleman who drew them up, who is well known as a medical statist. It seems to us that the whole point lies in the result of the comparison instituted between the stations under the Acts and those not under the Acts, and that any deduction from the total averages for all stations would only be irrelevant and misleading.

*Old Subscriber.*—We see no harm in the course described.

### CALIFORNIAN MEDICAL DEGREES.

*To the Editor of* THE LANCET.

SIR,—In answer to your question for information as to "what period of study and the nature of the examinations" I underwent, I beg to inform you that it consisted of a year's preparatory study with a medical practitioner, three years' attendance at lectures, and daily attendance at hospitals. The examination for the degree of the Medical Department of the University of California is the same as adopted by such schools as the Jefferson College of Philadelphia, Bellevue Hospital, College of New York, &c., and consists in verbal and written examinations on Anatomy, Surgical Anatomy, Physiology, General and Orthopædic Surgery, Theory and Practice of Medicine, Medical Jurisprudence, Clinical Medicine, Chemistry, Materia Medica, Obstetrics, Diseases of Women and Children, and Ophthalmology. In conclusion, I beg to refer you to an article on page 4 of the *San Francisco News-Letter* of October 31st, which shows the matter which led to this correspondence in its true light. Yours &c.,
Weymouth-street, Nov. 23rd, 1874. A. P. WHITTELL.

*Dr. D. J. Allen.*—We think six guineas would be a right charge, reckoning either by distance or time.

THE paper of *Mr. Esson* (Port Elizabeth) shall be published.

*Dr. Wiltshire* is thanked for his courtesy.

*M.R.C.S.E.*—Nothing can be done in the matter.

### BLUE GUMS AND LEAD-POISONING.

*To the Editor of* THE LANCET.

SIR,—In answer to Dr. Grayling's question, "whether the blue line upon the margin of the gums can have any other origin" than the well-known mark derived from the ingestion of lead, I may inform him that the use of finely-powdered charcoal as a dentrifice will after a time produce a similar appearance. Yours truly,
Buckingham Palace-road, Nov. 24th, 1874. H. M. D.

### FEES OF MEDICAL WITNESSES AT CORONERS' INQUESTS.

*To the Editor of* THE LANCET.

SIR,—The question of coroners' fees comes up again for the hundredth time. I give evidence at inquests in different districts of Central Middlesex, and I come into contact with two coroners' officers. One of these pays the fees at the termination of the inquest. He hands me two sovereigns only; and in conversation with him I gather that, by a sort of tacit agreement, the coroner allows him to pay the fees, so that he might be able to finger the odd shillings. The other never pays the fees at the inquest, but brings two sovereigns to my surgery from a fortnight to *three months* after. On one occasion he had to pay me for two inquests and post-mortems, and I rather objected to four shillings being kept back. He then said, "If you must have it, you must; but it is a part of my living" (*sic*). "Oh," I said, "I should like to ask the coroner if that is the fact." Medical men must form their own opinions from what I state. The coroner should in all cases pay the fees himself. They do so in the country districts.—Yours truly,
November 9th, 1874. A. G. P.

*** The present is an opportune time for discontinuing anything that is objectionable in the system of choosing or paying witnesses.—ED. L.

*Enquirer.*—The medical charge of coolie ships can only be obtained at Calcutta, or from the other ports of departure, as China or the East Indies. There is no agent in the United Kingdom. The pay averages from 10*s.* to 13*s.* per head per voyage for all landed at the port of destination. The prospect of a stranger obtaining a remunerative practice in New Zealand, Australia, or Tasmania is neither better nor worse than his prospect of obtaining it in England.

*Dr. Milner Fothergill* is thanked. We shall be very pleased to receive the communication.

SCURVY.

*To the Editor of* THE LANCET.

SIR,—The statement in your last impression, that a ship arrived recently in this port with scurvy on board, is erroneous. The fact is that a sailor came before me about ten days since, suffering with scurvy, and that I communicated the fact to the Board of Trade; but his *ship* had arrived in the East India Docks, in London, a few days before, and the man only came here on a visit to some friends.—Yours truly,

WALTER G. WALFORD,
King's Lynn, Nov. 23rd, 1874. Medical Officer to the Port of Lynn.

*** Dr. Walford is thanked for the correction. We have since learned that the Board of Trade have ordered an official inquiry in this case.—ED. L.

COMMUNICATIONS, LETTERS, &c., have been received from—Sir W. Gull, London; Sir James Paget, London; Sir Henry Thompson, London; Prof. Welch, Netley; Dr. Wilson Fox, London; Prof. Ferrier, London; Lord Brabazon; Mr. Erichsen, London; Prof. Martin Duncan, London; Dr. Burney Yeo, London; Dr. Bastian, London; Mr. Berkeley Hill, London; Mr. De Morgan, London; Dr. Fagge, London; Dr. Brunton, London; Dr. Sidney Ringer, London; Dr. Morell Mackenzie, London; Mr. Jonathan Hutchinson, London; Dr. Thorne Thorne, London; Dr. B. W. Richardson, London; Dr. Buzzard, London; Dr. Duckworth, London; Mr. Morrell, London; Mr. Lattimer; Mr. Darcet, London; Dr. O'Connor, Welshpool; Mr. S. Smith, Sittingbourne; Dr. De Renzy, Punjab; Mr. Wigner, London; Mr. Heisch, London; Mr. Thos. Smith, London; Mr. Less, Upper Teesdale; Dr. Wiltshire, London; Dr. Walker, Darlington; Mr. John Foster; Dr. H. Thompson, London; Dr. Walford; Surgeon-Major Thornton, Shalhabad, Bengal; Dr. Wilson, Edinburgh; Mr. Tucker, London; Dr. Spencer Cobbold, London; Dr. M. Fothergill, London; Mr. Duff, London; Mr. Gamgee, Birmingham; Mr. Williams, Chichester; Dr. Liveing, London; Dr. Sutton, London; Mr. Wagstaffe, London; Mr. Churchill, Chesham; Mr. Barrett, London; Mr. Corbett, London; Mr. Beal, London; Mr. Drew, Egham; Mr. Smith, Dorchester; Mr. Wood, Maidstone; Mr. Hemming, London; Mr. George Seymour, London; Mr. Rump, Wells-next-the-Sea; Mr. Reynolds, Isle of Man; Dr. Bucknill, Wakefield; Dr. Weakes, Luton; Dr. J. Williams, London; Mr. Blackburn, Fleetwood; Dr. Whipham, London; Dr. Dudfield, London; Dr. Lowndes, Liverpool; Dr. Bacon, Cambridge; Dr. Whitticll, London; Dr. Ringland, Dublin; Dr. Kebbell, Brighton; Dr. De Lisle, Guernsey; Dr. Crisp, London; Dr. Yeld, Sunderland; Dr. Ralfe, London; Dr. Muscraft, Pontefract; Dr. Whitworth; Dr. Fenwick, London; Mr. Callender, London; Mr. Poole, London; Dr. Myrtle, Harrogate; Dr. Ryley; Mr. Wilde, Liverpool; Mr. Johnston, West Bromwich; Mr. Piper, Plymouth; Miss Tibbits, London; Mr. Davies, Mountain Ash; Dr. Boyland, Baltimore; Mr. Burgoyne, London; Dr. Hayne, Stoke; Mr. Ensor, Port Elizabeth; Messrs. Richardson and Co., Leicester; Mr. Bulley, London; M. Caussidon, Cardillac; Mr. Mocatta, Brighton; Dr. Grant, Longton; Mr. Barford, Sandhurst; Messrs. Wilcox & Co., London; Mr. Knott, Bromyard; Mr. Love, London; Mr. Kimpton, London; Mr. Reeves, London; Mr. Whalley, Bradford; Mr. Callant, Bridgnorth; Dr. MacNab, Bury St. Edmunds; Mr. Cartwell, Carlisle; Mr. Hudson, Redruth; Dr. Millar, Clapton; Dr. Eastes, London; Dr. Drysdale, London; Mr. C. Holthouse, London; Mr. Dutt, Glasgow; Dr. A. R.; M.D.; The General Secretary of the British Medical Association; Enquirer; Old Subscriber; A. F.; C. L. M.; A. F. C.; Eclectic; X. Y.; &c. &c.

LETTERS, each *with enclosure*, are also acknowledged from — Mr. Hodgson, Sheffield; Dr. Newman, Stamford; Mr. Noble, Kendal; Mr. Bradshaw, Nottingham; Dr. Christison, Preston; Mr. Kershaw, Manchester; Dr. Buchanan, Glasgow; Mr. Giles, Coggeshall; Dr. Easby, Darlington; Mr. French, Beaconsfield; Mr. Brock, Thurso; Mr. Startin, Edinburgh; Dr. Colman, North Walsham; Mr. Skrimshire, Holt; Mr. Scott, Westray; Mr. Trimmer, Gamlingay; Dr. Wrangham, Wragby; Mr. Harris, Bangor; Mr. Davis, Duffryn Ffrwd; Mr. Henry, Much Wenlock; Mr. Tandy, Birkenhead; Colonel Morrison, Colchester; Mr. Jay, Chippenham; Dr. Morris, Barnsley; Mr. Mackenzie, London; Mr. Watson, Thaxted; Mr. Howse, London; Dr. Whitmore, Hounslow; Mr. Walker, Crick; Dr. Morrison, London; Mr. Turner, Hingham; Dr. Campbell, Staunton; Mr. Kemm, Corsham; Mr. Nesfold, Manchester; Mr. Jackson, Whitby; Dr. Roberts, Sheffield; Mr. Robertson, Peckham; Mr. King, Ely; Mr. Samsbury, Devizes; Mr. Currie, Thetford; Dr. Mudd, Storrington; Dr. George, Whitchurch; Mr. Walker, Louth; Mr. Skipp, Barnsley; Mr. Kilner, Bury St. Edmunds; W. W., Accrington; J. D., Nottingham; A., Manchester; Medicus, Aberdare.

*Surrey Advertiser, Newcastle Daily Chronicle, Manchester Guardian, Liverpool Daily Post, Sunday Times, East London Observer, Cork Constitution, Whitby Gazette, Huddersfield Daily Chronicle, Lincoln Gazette, Dublin Evening Mail, Isle of Man Times, St. Pancras Gazette, Pictorial World, Newcastle Daily Journal, Liverpool Daily Courier,* and *Glasgow News* have been received.

## METEOROLOGICAL READINGS

*(Taken by Steward's Instruments).*

THE LANCET OFFICE, Nov. 26TH, 1874.

| Date. | Barometer reduced to Sea Level, and 32° F. | Direction of Wind. | Wet Bulb. | Dry Bulb | Solar Radia. in Vacuo | Max. Temp. Shade | Min. Temp. | Rainfall. | Remarks at 8 A.M. |
|---|---|---|---|---|---|---|---|---|---|
| Nov. 20 | 29·81 | WNW | 42 | 44 | ... | 49 | 38 | 0·07 | Overcast |
| „ 21 | 30·12 | S. | 34 | 35 | ... | 38 | 30 | ... | Foggy |
| „ 23 | 30·08 | N. | ... | 33 | ... | 41 | 25 | ... | Foggy |
| „ 24 | 30·19 | S.E. | ... | 31 | ... | 41 | 26 | ... | Foggy |
| „ 25 | 30·02 | S. | 39 | 41 | ... | 42 | 26 | ... | Overcast |
| „ 26 | 29·88 | S.E. | ... | 34 | ... | 35 | 29 | 0·09 | Overcast |

# Medical Diary for the ensuing Week.

### Monday, Nov. 30.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M each day, and at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.
ST. MARK'S HOSPITAL.—Operations, 9 A.M. and 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
MEDICAL SOCIETY OF LONDON.—8 P.M. Mr. J. Astley Blenam: A living Specimen of Spontaneous Congenital Dislocation of the Patella; and another from whom a Fibro-cystic Growth and portion of the Styloid Process has been removed.—Mr. Richard Davy, "On Resection of the Knee-joint in Young Subjects."

### Tuesday, Dec. 1.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.
PATHOLOGICAL SOCIETY OF LONDON.—8 P.M. The following Specimens will be exhibited:—Chondroma of Lachrymal Gland; Osteoma of Superior Maxilla; Obscure Abdominal Tumour; Round-celled Sarcoma of the Cerebral Pia Mater; Popliteal Aneurism Cured by Pressure, associated with Aortic Aneurism; Parts after Resection of the Hip- and Elbow-joints; Cardiac Aneurism; Aneurism of Aorta; Tattooing in Colours; Rupture of the Trachea; &c. &c.

### Wednesday, Dec. 2.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at 1½ P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL. — Operations, 2 P.M., and on Saturday at the same hour.
LONDON HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.
OBSTETRICAL SOCIETY OF LONDON.—8 P.M. Discussion on Dr. Gervis's paper, "On Retroversion of the Gravid Uterus." — Dr. Hogan, "On the Dysmenorrhœal Membrane" (illustrated). — Dr. Bathurst Woodman, "On the Treatment of Mammary Abscess by Rest."—Dr. Madge, "On a Case of Labour complicated by Pelvic Tumour and by Convulsions."—Mr. Ashburton Thompson, "On Zinc Phosphate in Cases of Amenorrhœa."—And other communications.
ROYAL MICROSCOPICAL SOCIETY. — 8 P.M. Dr. C. T. Hudson, "On some Male Rotifers."

### Thursday, Dec. 3.

ST. GEORGE'S HOSPITAL.—Operations 1 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.
HARVEIAN SOCIETY OF LONDON. — 7½ P.M. Special Meeting of Council.—8 P.M. Mr. J. R. Lane (the President), "On the Modern Treatment of Syphilis."

### Friday, Dec. 4.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

### Saturday, Dec. 5.

HOSPITAL FOR WOMEN Soho-square.—Operations, 9½ A.M.
ROYAL FREE HOSPITAL.—Operations, 9 A.M. and 2 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.


## TERMS FOR ADVERTISING IN THE LANCET.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| For 7 lines and under | £0 | 4 | 6 | For half a page | £2 | 12 | 0 |
| For every additional line | 0 | 0 | 6 | For a page | 5 | 0 | 0 |

The average number of words in each line is eleven.

Advertisements (to ensure insertion the same week) should be delivered at the Office not later than Wednesday; those from the country must be accompanied by a remittance.

N.B.—All letters relating to Subscriptions or Advertisements should be addressed to the Publisher.

**Agent for the Advertising Department in France—**
Mons. DE LOMINIE, 208, Rue Grenelle St. Germain, Paris.